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THE
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THE MODERN MATERIA MEDICA

The Source, Chemical and Physical Properties,
Therapeutic Action, Dosage, Antidotes and
Incompatibles of all Additions to the Newer
Materia Medica that are Likely to be Called
for on Prescriptions, together with the Name
and Address of the Manufacturer or Proprie-
tor, and in the Case of Foreign Articles, of
the American Agent

SECOND EDITION
REVISED AND ENLARGED

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1911

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1911

PREFACE TO THE SECOND EDITION.

In the five years that have elapsed since the first edition of *The Modern Materia Medica* was issued, the out-put of additions to the materia medica has been no less prolific than in the preceding decade. Each number of *THE DRUGGISTS CIRCULAR* has contained a list of these newer medicaments. And, with a view of making this information more readily available, these lists have been embodied in the present edition of *The Modern Materia Medica*. The additions also include much information obtained from other sources.

A new departure in this edition is the statement of the name and address of the manufacturer or proprietor of each medicament described, where such have been obtainable, and of the agent in this country for each article of foreign origin on sale here. This feature will, we believe, greatly enhance the every-day value of the work as a book of reference at the prescription counter.

PREFACE TO THE FIRST EDITION.

It is practically impossible for the pharmacist of to-day to keep pace with the developments in modern chemistry as regards new remedies. Hundreds and hundreds of new therapeutic agents are introduced and advertised yearly, some meritorious and of permanent interest, others of but passing importance.

With a view of affording a source of accurate and unbiased information concerning the newer additions to the materia medica, THE DRUGGISTS CIRCULAR some time ago began the publication of an extended descriptive list of new remedies, including some older substances newly brought to the attention of the medical profession, and also a number of nutritives specially designed for use by the sick and convalescent.

In conjunction with the regular alphabetical continuation of the list from one issue to another of the CIRCULAR, all the remedial agents that were introduced from time to time during its publication were described in supplemental lists, thus constantly bringing the matter up to date.

These lists were completed in the issue for November, 1905. They have since been revised and rearranged, so that all their items appear in continuous alphabetical order, and are now presented in the following pages.

It is confidently believed that "The Modern Materia Medica" is the most complete and reliable book of its kind now obtainable and that it will prove a valuable addition to the reference library of the pharmacist.

**THE MODERN
MATERIA MEDICA**

1

A

ABANON is described as "the magnesium salt of a complex phosphorotartaric acid." It occurs as a white, tasteless powder said to contain 12 per cent. of magnesium and sparingly soluble in water. It is put forward as a mild laxative.—Mfr.: Dr. C. Sorger, Frankfort-on-M., Germany; agts.: C. Bischoff & Co., New York.

ABILENA WATER is an American cathartic water containing in each gallon, according to analysis, 8.9 grains of sodium bicarbonate, 10.7 grains calcium bicarbonate, 0.9 grain of iron bicarbonate, 0.5 grain of sodium nitrate, 3229.3 grains of anhydrous sodium sulphate, 71.3 grains of anhydrous magnesium sulphate, 45 grains of calcium sulphate, 65 grains of sodium chloride and a trace of silica; no ammonia.—Parke, Davis & Co., Detroit, Mich.

ABRIN (also known as *jequiritin*) is the active principle of jequirty seed (*abrus precatorius*). It is a yellowish or brownish powder, soluble in sodium chloride solution. While extremely poisonous when introduced into the circulation, it is believed to be harmless when swallowed. It is used in 1:500,000 solution in place of jequirty infusion, in pannus, chronic conjunctivitis, and the like. Great care should be exercised in handling it; it is very dangerous in the nose, eyes or on wounds. Its solutions should be prepared fresh as wanted. Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ABROTANOL PASTILLES contain extract of artemesia abrotanum and menthol as their essential ingredients. They are chocolate-coated and are offered as an intestinal astringent and stomachic.—Mfrs.: G. Hell & Co., Troppau, Austria.

ACERDOL.—A trade name for *calcium permanganate*.

ACESTORIA.—Described as a 1 per cent. solution of cocaine in a volatile oil, containing some nitroglycerin and hyoscynamine. It is employed in dentistry as a local anesthetic.

ACETAL (*diethyl-acetal*; *diethyl-aldehyde*; *ethylidene-diethylether*), $\text{CH}_3\text{CH}:(\text{OC}_2\text{H}_5)_2$, occurs as a colorless, volatile liquid of the specific gravity 0.831 at 20° C., of pleasant odor, and agreeable after-taste. It dissolves in about 20 parts of water and 25 of chloroform, and is miscible in all proportions with alcohol or ether. It is used as a hypnotic in doses of 2 to 3 fluid drams.—(Nonproprietary.)

ACETAMIDO-ETHYL-SALICYLIC ACID.—A synonym of *benzacetine*.

ACETANISIDIN.—See *methacetin*.

ACETANNIN is an American designation for *diacetyl-tannin* or *tannigen*.

ACETMETHYLANILID is the chemical designation of *esalgin*.

ACETOCAUSTIN is a 50 per cent. solution of trichloroacetic acid, used as a caustic on warts, corns, etc.

ACETOFORM is a brand name for *acetone chloroform*, a product better known as *chlorotone* and described herein under the title *chlorbutynal*.

ACETOL-SALICYLIC ACID ETHER is better known by its trade name of *salacetol*.

ACETOMORPHINE.—See *heroin*.

ACETON (not acetone) is a preparation offered as a headache and grippé remedy). According to government analyses it contains acetanilide, caffeine and sodium bicarbonate.—Mfr.: Aceton Med. Co., Mystic, Conn.

ACETONAL is a 10 per cent. solution of aluminium and sodium acetate, $Al_2(OH)_3 \cdot (C_2H_3O_2)_3Na$, obtained by dissolving 82 parts of anhydrous sodium acetate in 4,050 parts of solution of aluminium acetate (Ph. G.). It is used as an antiseptic.—Mfra.: Athenstaedt & Redeker, Bremen; agts.: Lehn & Fink, New York.

ACETONE ALCOHOL is a trade name given to a brand of methyl alcohol.

ACETONE CHLOROFORM is *chlorbutynal*.

ACETONE-COLLODION is the same as *filmogen*, which see.

ACETOPHENONE is the chemical name of *hypnone*.

ACETOPHENONEPHENETIDID.—See *malarin*.

ACETOPYRIN is better known as *acopyrin*, which see.

ACETOTOLUID, ORTHO, also designated as *aceto-ortho-amidotoluid* or *orthotolyl-acetamide*, C_6H_4NO , occurs as colorless crystals which are freely soluble in alcohol or ether and sparingly soluble in water. It is antipyretic in action; dose, 3 to 8 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACETOTOLUID, PARA, (*paratolylacetamide*), occurs as colorless crystals sparingly soluble in water and melting at $151^\circ C$. It is used as an antipyretic. Dose, 15 to 30 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACETOZONE ($C_6H_5CO.O.O.COCH_3$), formerly known as *benzozone*, and chemically definable as benzoyl-acetyl peroxide, was discovered by Profs. P. C. Froer and F. G. Novy, of the University of Michigan. In the pure state it forms crystals having a melting-point of 40° to $41^\circ C$.

dissolves in 1,000 to 10,000 parts of water, 20 of oil, is slightly soluble in alcohol, fairly so in ether or chloroform, but slowly decomposing in all these solvents excepting petroleum oil; it is decomposed by contact with alkalies and organic matter of all kinds. It is marketed only as a 50 per cent. mixture with an inert absorbent powder, which occurs as a light, cream-colored powder of peculiar odor and pungent taste. In the presence of water it gives off H_2O_2 by hydrolysis. Acetozone is a germicide that has been used chiefly in typhoid fever, internally, though to some extent also in surgery and gynecology, externally. It is generally used in a solution of 30 grains to the half gallon, the insoluble portion being allowed to settle and the clear liquid decanted; and in this form it is given internally, 2 to 6 ounces every 4 hours. It is also used topically in 10 per cent. triturations with boric acid, talcum, etc.; and internally, freely diluted with milk sugar, in capsules, 3 to 5 grains 3 times a day. Its solutions should be kept in the refrigerator.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

ACET-PARA-AMIDO-SALOL, or *acet-para-amido-phenyl-salicylate*, is *salophen*.

ACET-PARA-PHENETIDIN and ACET-PHENETIN are synonyms of *phenacetin*, a chemical now official as *acet-phenetidin*.

ACET-THEOCIN-SODIUM (*soluble theocin*) is *theocin sodioacetate*, and contains about 60 per cent. of theocin. It occurs as a white powder soluble in about 23 parts of water yielding an alkaline solution from which theocin is precipitated by acids; insoluble in alcohol or ether. It is used as a diuretic. Dose, 3 to 5 grains 3 or 4 times daily, in solution, after meals.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

ACETYLATOXYL (*sodium acetylaminophenylarsonate*) is used in sleeping sickness and other diseases and in the same doses as atoxyl.

ACETYL CHLORIDE, CH_3COCl , is a colorless liquid of the specific gravity 1.15 and boiling point $55^\circ C$. In the presence of water it splits up into hydrochloric acid and acetic acid. It has been recommended as a succedaneum for hydrochloric acid as a digestive.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACETYL-ORTHO-CUMARIC ACID.—See *tylmarin*.

ACETYL-PARA-ETHOXY-PHENYL-URETHANE. — See *thermodin*.

ACETYL-PARAOXY-PHENYL-URETHANE is marketed as *neurodin*.

ACETYL-PHENYL-HYDRAZIN, also known as *hydracetin* and *pyrolin*, $C_8H_{10}N_2O$, occurs as a white, crystalline powder, odorless and almost tasteless, readily soluble in alcohol or chloroform, melting at $128^\circ C$., and slightly soluble

in cold water or ether. While possessed also of antipyretic and analgesic action, and hence used to some extent in rheumatism and febrile affections, acetyl-phenylhydrazin is now employed chiefly in psoriasis, externally, in 10 per cent. ointments. It is rather toxic. The dose as an antipyretic is $\frac{1}{2}$ to 3 grains a day; in sciatica and articular rheumatism, 3 to 5 grains daily.—Mfrs.: E. Merck, Darmstadt; agts.: Merck & Co., New York.

ACETYLSALICYLAMIDE, also known by the trade name *ethrisin* or *æthrisin*, is obtained by causing acetic anhydride to act upon a mixture of salicylamide and glacial acetic acid. It occurs as white crystals melting at 143° to 144° C. and readily soluble in alcohol and acetic acid. It is intended for use as an antirheumatic and anodyne.—Mfrs.: Kalle & Co., Biebrich-on-Rh., Germany; agts.: Lehn & Fink, New York.

ACETYL-SALICYL-PHENETIDIN is the chemical designation for *thermol*.

ACETYL-TANNIN is a synonym of *tannigen*.

ACETYSAL is the trade name adopted for *acetosalicylic acid* by G. & R. Fritz-Petzold & Süss, Vienna, Austria.

ACID, ACETYLMETHYLENE-DISALICYLIC is known in the trade as *urasol*.

ACID, ACETYLSALICYLIC is better known as *aspirin*.

ACID, AGARIC, AGARICIC, OR AGARICINIC is pure *agararicin*.

ACID, ALPHATOLUIC (AND ALPHATOLUYLIC) are synonyms of *phenyl-acetic acid*.

ACID, ANILINSULPHONIC is better known as *sulphuric acid*. See this.

ACID ARSINOSALICYLIC is an organic arsenical occurring as colorless needles melting at 300° C., and easily soluble in warm water and in alcohol, but very slightly soluble in ether. It is intended as a succedaneum for atoxyl as an alterative and antiluetic.—Mfr.: W. Adler, Carlsbad, Germany.

ACID, ASEPTIC OR ASEPTINIC, is described as a solution of boric acid and salicylic acid in water.

ACID BENZOBORIC occurs as colorless leaflets possessing a benzoïn-like odor and slightly pungent taste. It is sparingly soluble in water, more freely in alcohol. It is used as an intestinal and vesical disinfectant. Dose, 10 to 20 grains.—Mfr. E. Merck, Darmstadt; agts.: Merck & Co., New York.

ACID, BETA-PHENYLACRYLIC.—See *acid, cinnamic*.

ACID, CACODYLIC, or *dimethylarsenic acid*, $(\text{CH}_3)_2\text{AsO.OH}$, is an organic compound of arsenic brought to the notice of the medical profession by Prof. A. Gautier in 1897, on account of its relative non-toxicity in spite of its high content in arsenic (54 per cent.). It forms white,

odorless crystals, that are soluble in water or alcohol. It has been used in psoriasis, diabetes, leucocythemia, and Basedow's disease, in doses of $\frac{1}{2}$ to 1 grain 3 or 4 times a day in mixture flavored with syrup of orange and peppermint oil. Latterly, cacodylic acid has been largely superseded by its sodium salt. Its iron, gualacol, mercury, and quinine salts are also in vogue for special indications. It imparts a garlicky odor to the breath and perspiration. Some authors explain the relative non-toxicity of cacodylic acid on the score that only 2 or 3 per cent. of it is absorbed, the remainder being eliminated unchanged with the urine.—(Nonproprietary.)

ACID, CAMPHORIC, $C_{10}H_{16}O_8$, obtained from camphor by oxidation with nitric acid, is now official

ACID, CARBAZOTIC, is *picric acid*.

ACID, CATHARTIC, in reality a mixture of the calcium, magnesium and potassium salts of cathartinic acid as they exist in senna leaves, occurs as brownish-black granules or scales, soluble in water. It is used instead of senna chiefly in children. Dose for a child, $1\frac{1}{2}$ to 3 grains; adults take 2 to 3 times as much.—Mfr.: E. Merck, Darmstadt; agts.: Merck & Co., New York.

ACID, CINNAMIC (*cinnamylic or beta-phenyl-acrylic*), $C_9H_8O_2$, is prepared synthetically or obtained from storax, balsam of tolu or cinnamon oil. It forms white or yellowish leaflets, soluble in alcohol and fatty oils. It was introduced some years ago by Landerer as a remedy for phthisis and lupus to be used intravenously or by parenchymatous injection in 5 per cent. oily emulsion containing 0.7 per cent. of sodium chloride, of which 2 to 15 minims were injected two or three times a week. Latterly it has been practically superseded by its sodium salt, which is neutral and freely soluble. Hoff a few years ago recommended it internally in phthisis, combined with arsenous acid and opium extract, in doses of $1/20$ to $1/6$ grain thrice daily.—(Nonproprietary.)

ACID CINNAMYLCAODYLIC consists, according to Crinon, of equal parts of cacodylic acid and cinnamic acid. It is intended as an antitubercular and alterative.

ACID CRESOTINIC (*acid paracresotinic*), $C_8H_7COOH \cdot CH_3$, occurs as a white to reddish powder melting at about $150^\circ C$. It has been used as an antipyretic and intestinal antiseptic. Dose, as antipyretic, 2 to 10 grains; as intestinal antiseptic, $\frac{1}{2}$ to 1 grain.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACID DIETHYLBARBITURIC.—See *veronal*.

ACID DIODOPARAPHENYLARSINYLIC is of golden yellow color, melts at $80^\circ C$., and is soluble in hot acetic acid. It is proposed as similar in effect to atoxyl.

ACID, DIODOSALICYLIC, has the composition $C_6H_4I_2(OH)COOH$, and occurs as yellowish crystals that are soluble in alcohol or ether. It has been employed to a very

limited extent as an antipyretic, analgesic and antiseptic, chiefly in rheumatism and gout. The dose is 8 to 20 grains.

—Mfrs.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACID, ELLAGIC is the chemical equivalent of *gallogen*.

ACID FILICIC (*filicin*, *filicinic acid*), $C_8H_8.OH(OC_2H_5O)_2$, is obtained from malefern rhizome, and occurs as yellowish crystals or yellow powder, soluble in alcohol or ether. It is used as an anthelmintic. Dose, 8 to 15 grains, with calomel or jalap.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACID, GLYCERINOPHOSPHORIC, $C_2H_3(OH)_2O.H_2PO_3$, is a colorless liquid of the specific gravity 1.125. It was introduced as a directly assimilable nerve tonic, but is now used only in the form of its salts—calcium, iron, potassium, quinine, sodium, strychnine, etc. (See these.)

ACID, GLYCOCHOLIC, $C_{20}H_{35}NO_6$, is the principal constituent of ox gall, used therapeutically in the form of its sodium salt, which see.

ACID GLYCONIC (*dextronic* or *maltonic acid*), $OH.CH_2-(CH.OH)_4.CO_2H$, is an oxidation product of glucose or cane sugar. It occurs as a syrupy mass which does not reduce Fehling's solution and is miscible with water. It is used, with sodium bicarbonate, in diabetic coma. Dose, 1 to 2 ounces.—Mfr.—E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACID GLYMNEMIC, $C_{22}H_{33}O_{12}$, is obtained from the leaves of *gymnema sylvestris*, and occurs as a greenish-white powder possessing an acid-acidulous taste. It is readily soluble in alcohol, sparingly soluble in water. It is employed for producing a temporary aguesia (tastelessness) for sweet as well as bitter substances. A 1 to 5 per cent. solution is used, as a mouth-wash or on the leaves to be chewed.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACID GYNOCARDIC (*chaulmoogra acid*), $C_{14}H_{24}O_2$, is obtained from *chaulmoogra* oil, the oil of the seed of *gynocardia odorata*. It occurs as fatty masses, melting at about 30° C. and soluble in alcohol. It is used in leprosy, syphilis, tuberculosis and chronic rheumatism. Dose, 1 to 3 grains, in capsules; externally in 5 to 10 per cent. ointments.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACID HYDROCINNAMIC.—See *acid phenylpropionic*.

ACID, IODIC, HIO_3 , is derived from iodine by oxidation with nitric acid, and appears as a white crystalline powder, readily soluble in water, but only slightly soluble in alcohol, ether or glycerin. It is employed externally as a caustic and astringent, and internally as a substitute for potassium iodide and as a hemostatic and anti-emetic in

gastric hemorrhage; also used as an oxidizer and a reagent for morphine. Dose, 1 to 3 grains, well diluted, thrice daily. It is quite poisonous.—(Nonproprietary.)

ACID IODO-FORMIC is a solution "each cubic centimeter of which is equivalent to 1 centigram of formic acid saturated with metallic iodine." It is offered for use by intramuscular injection in syphilis. Dose, 15 minims (1 c.c.). *Acid iodo-formic dilute* represents in every 15 cubic centimeters 1 centigram of formic acid saturated with iodine. It is intended for internal administration. Dose, a tablespoonful with meals and every two to three hours.—Mfrs.: Anglo-American Pharmacal Co., New York; agts.: E. Fougere & Co., New York.

ACID IODOBENZOIC, $C_6H_4.COOH.IO$, occurs as yellowish leaflets, melting at $244^\circ C.$, that are sparingly soluble in water. It is offered as a succedaneum for iodoform as a vulnerary.

ACID, LARICINIC, is pure *agaricin*.

ACID, METHYLENE-DI-SALICYLIC is marketed under the name of *formosal*.

ACID, METHYLENE-HIPPURIC. See *hippol*.

ACID, NAPHTHYLAMINE-SULPHONIC (*naphthionic acid*), $C_{10}H_7NH_2.SO_3H$, was recommended by Prof. Riegler in iodism, in nitrite poisoning, and in bladder trouble caused by strong alkalinity of the urine. It occurs as a white powder sparingly soluble in water. Dose in iodism, $7\frac{1}{2}$ grains half hourly up to 45 grains; in bladder disease, the same quantity in wafers three or four times a day, associated with irrigation of warm 1:1000 solution.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACID NITROPHENISIC or NITROXANTHIC.—See *acid picric*.

ACID NUCLEOTIN-PHOSPHORIC.—See *solurol*.

ACID ORTHO-AMIDOSALICYLIC is, according to Crinon, salicylic acid in which one hydrogen atom has been replaced by NH_2 . It occurs as an amorphous, grayish-green, almost odorless powder, having a sweetish taste and insoluble in water or alcohol. It is employed as an antirheumatic.

ACID, OSMIC, known also as *osmium tetroxide* and *perosmic acid*, OsO_4 , is prepared by heating finely powdered osmium in oxygen. It occurs in yellow, deliquescent needles; odor pungent and suffocating; and the vapor is strongly irritant to the air passages. Soluble in water; decomposed by alcohol and ether. Used internally, in muscular rheumatism and neuralgia; and externally, for the removal of tumors. Employed in microscopy as a stain. Dose: 1/60 grain 3 times a day. Injection, 1/20 to 1/4 grain daily in 1 per cent. solution. Incompatible with organic substances; phosphorus; ferrous sulphate; iodides. An-

tidotes, inhalation of hydrogen sulphide.—(Nonproprietary.)

ACID, OXYNAPHTHOIC (*Alpha*), also known as *naphtholcarbonic acid*, $C_{10}H_7.OH.CO_2H$, appears as white crystals that are soluble in alcohol and oils. It is used as an intestinal disinfectant in doses of 1 to 3 grains, and as an antiparasitic externally in 10 per cent. ointments. It is rarely prescribed at the present time.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACID, OXYNAPHTHYL-ORTHO-OXYTOLUYLIC, is the chemical name of the article marketed as *epicarin*.

ACID, PARA-AMIDOBENZOIC ETHYL ESTER, is a synonym of *anesthesin*.

ACID, PARA-AMIDO-BENZOL-SULPHONIC, is commonly known as *sulphanilic acid* which see.

ACID, PARA-ANILIN-SULPHONIC.—See *sulphanilic acid*.

ACID PARAIODOPHENYLARSENYLIC is an arsenylic acid in which the amino group has been replaced by iodine. It is infusible, soluble in alcohol, acetone and hot acetic acid.

ACID, PEPITZAHOIC is synonymous with *perezol* which see.

ACID, PEROSMIC, is a synonym of *osmic acid*.

ACID, PHENYLACETIC (*alpha-toluic* or *alpha-toluylic acid*), $C_6H_5.CH_2.CO_2H$, was introduced as an intestinal antiseptic and antitubercular agent, but is very little heard of now-a-days. It forms white leaflets, soluble in alcohol and ether. Dose, 10 to 15 drops of a 1 in 6 hydro-alcoholic solution three times daily. Mfr. E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACID PHENYLPROPRIONIC (*acid hydrocinnamic*), $C_6H_5.CH_2.CH_2.CO_2H$, forms colorless crystals that melt at about $47.5^\circ C.$, and are sparingly soluble in water but readily soluble in alcohol. It is used as an antitubercular. Dose, 10 to 30 drops of a 20 per cent. alcoholic solution.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACID PICRIC (*acid picric, picronic, carbazotic, nitroxanthic* or *nitrophenic*), $C_6H_3N_3O_7$, occurs as yellowish, lustrous flat, odorless, bitter crystals, readily soluble in alcohol, ether and chloroform, but slightly soluble in water. It has been used to a small extent internally as an antimalarial and in trichiniasis, but is employed chiefly as an application to burns and erysipelas in 2 per cent. hydroalcoholic solution. Dose, $\frac{1}{2}$ to 2 grains in solution. It is incompatible with all oxidizable substances, and dangerously explosive with sulphur, phosphorus, etc.—(Nonproprietary.)

ACID PROPYLO-BARBITURIC is the designation a German competing firm has applied to its make of the product better known by the trade name *proponal*.—Mfr.: Dr. A. Voswinkel, Berlin W.

ACID QUINIC, $C_6H_7(OH)_2COOH$, occurs as colorless prisms, or a white, crystalline powder, readily soluble in water, sparingly soluble in alcohol and almost insoluble in ether. It is used in gout. Dose, 8 grains several times daily.—(Nonproprietary.)

ACID SALICYLOSALICYLIC. See *diplosal*

ACID, SALOLORTHOPHOSPHINIC, is the chemical name of *solvosal*.

ACID SCLEROTINIC is derived from ergot, and occurs as a brownish powder, soluble in water. It is employed as a hemostatic as well as an antiepileptic. Dose, $\frac{1}{2}$ to 1 grain, once or twice daily.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ACID SOZOIODOLIC. See under *sozoidole*.

ACID, SULPHANILIC (*para-anilin-sulphonic* or *para-amido-benzol-sulphonic acid*), $NH_2C_6H_4SO_3H + 2H_2O$, is obtained by heating anilin with fuming sulphuric acid, and appears as white, efflorescent crystals slightly soluble in water but freely so in alcohol. It is used internally in coryza, catarrhal laryngitis, etc. It is also used in 5 per cent. solution in conjunction with $\frac{1}{2}$ per cent. solution of sodium nitrite as a test for bile in urine. Dose 10 to 20 grains once or twice daily, in solution with sodium bicarbonate.

ACID THYMINIC.—See *solurol*.

ACID, TRICHLORACETIC, CCl_3COOH , obtained from glacial acetic acid by the action of chlorine and sunlight, or by the oxidation of chloral, is now official.

ACID, TRINITROPHENIC, is *picric acid*.

ACID, URIC (*lithic acid*), $C_5H_4N_4O$, is a normal constituent of urine. In the pure state it occurs as white crystals, moderately soluble in glycerin, very slightly soluble in water, and insoluble in alcohol or ether. It has been employed by M. Maciel and others in tuberculosis. Dose, 15 grains three or four times a day.—Mfr.: E. Merck, and others.

ACIDOL is a trade name for *betaine hydrochlorate* (lycin), $C_5H_{11}NO_2.HCl$. The drug occurs as white crystals, of fruit-acid taste, and readily soluble in water. It contains 23.8 per cent. of hydrochloric acid, and is employed as a substitute for the latter as a digestive. Dose $7\frac{1}{2}$ to 15 grains, well diluted (it is slightly caustic in undiluted form). Marketed also as $7\frac{1}{2}$ -grain pastilles.—Mfrs.: Aktiengesellschaft für Anilinfabrikation, Berlin, Germany; agts.: Lehn & Fink, New York.

ACIDOL-PEPSIN is a combination of acidol (betaine hydrochloride) and pepsin in the form of pastilles and intended for use instead of hydrochloric acid and pepsin

where these are indicated at the same time. The regular kind (strongly acid) contain, each, 0.4 gram of acidol and 0.1 gram of pepsin; whilst pastilles No. II. each contain 0.05 gram of acidol, 0.2 gram of pepsin, and 0.25 gram of milk sugar.—Mfrs.: Actiengesellschaft für Antinfabrikation, Berlin, Germany; agts.: Lehn & Fink, New York.

ACOCANTHERA. An infusion of the bark of *acocanthera* has been brought forward as a substitute for digitalis preparations in the treatment of diseases of the heart.

ACOIN (*di-para-anisyl-monophenetyl-guanidine hydrochloride*) is one of the newer local anesthetics. It appears as a white, odorless, very bitter powder, soluble in 17 parts of water while dissolving freely in alcohol. It is very sensitive to alkalis, so that special precautions are necessary in preparing solutions of it, and these are readily affected by light. The product has hence not met with much favor. It have been recommended for Schleich's infiltration anesthesia in 1/10 per cent. solution containing 0.8 per cent. of sodium chloride; and Darier uses it in 1 per cent. solution to render subconjunctival injections painless, 1 to 3 drops being added to the medicated solution to be injected (mercury cyanide, etc.). It is now used mostly in conjunction with cocaine on the eyes.—Mfrs.: Chem. Fabrik von Heyden, Rudebeal near Dresden; agts.: Heyden Chem. Works, New York.

ACOIN OIL is a 1 per cent. solution of acoin base in peanut oil, and is used chiefly in eye diseases.

ACONITINE is perhaps no longer a new remedy, being in fact official in the U. S. P., but so much confusion and lack of definite information regarding it exists in the medical and pharmaceutical professions, that a brief reference to it here appears imperative. There are two distinct modifications of "aconitine" on the market, differing widely in chemical constitution and still more so in physiological activity and toxicity. *Amorphous aconitine*, the kind supplied by wholesale druggists on unspecified orders for "aconitine," is a mixture of the various amorphous bases of aconite, and is only about 1/15 as active as crystalline aconitine. Its dose is 1/60 to 1/15 grain; externally it is used in 1/2 to 2 per cent. ointments or solutions. The other form of aconitine is the *crystalline*, a highly potent and poisonous definite alkaloid from aconite, about 15 times as powerful physiologically as amorphous aconitine. Crystalline aconitine, the official variety, is given in doses of 1/600 to 1/200 grain; it is rarely prescribed in ointments, oleates, or solutions. It is obvious that the use of amorphous aconitine when the crystalline modification is intended by the prescriber will lead to disappointment, while the dispensing of the crystalline when the amorphous variety is meant is fraught with the most serious danger, and may be attended by disastrous results. Hence

the necessity of carefully discriminating. The antidotes are tannic acid (3 grains every half hour), atropine and stimulants, emetics hypodermically; and artificial respiration is generally resorted to.—(Nonproprietary.)

ACOPYRIN (*acetopyrin* or *antipyrin acetyl-salicylate*) is a sort of combination of aspirin and antipyrin. It forms a white powder of a faint acetic odor, readily soluble in alcohol or chloroform, but very slightly soluble in water; it possesses the reactions of antipyrin and gives a red coloration with ferric chloride. Acetopyrin, as appears from its composition, is an antipyretic, antineuralgic, and anti-rheumatic, its chief use being in the last-named capacity. It is advertised as free from the untoward effects of the salicylates and of antipyrin. The dose is 8 to 15 grains singly, and 45 to 90 grains a day, best given in cachets.—Mfrs.: Heyden Chem. Works, Radebeul near Dresden (Germany), and New York.

ACTOL is the name under which *silver lactate* was introduced some years ago, but which has since been abandoned, as far as this market is concerned, in favor of the plain chemical designation, under which it will be referred to in these columns.

ADE biscuits are laxative biscuits, each said to contain 0.1 gram of phenolphthalein.—Mfr.: C. F. Becker, Dresden, Germany.

ADEPS GOSSYPII is a new ointment base; a straw-colored, nearly odorless fatty mass insoluble in alcohol but completely soluble in chloroform, ether, benzine or benzene. It seems granular to the touch but produces smooth ointments when mixed with lanolin, lard or petrolatum. It keeps well even in a warm place. An analysis by Dr. Aufrecht shows a specific gravity at 15° C., of 0.927, melting point 35.5 C., congelation point 31° C.; saponification figure 206.2; iodine number 114. It thus consists of the solid fats of cottonseed oil. As drawbacks, its unhandsome appearance and its inability to take up much water are mentioned.

ADHESIVUM is a thick, flesh-colored, perfumed liquid, stated to consist of zinc oxide, collodion and carmine. When applied to wounds it quickly dries to an elastic coating which is not removed by washing in the ordinary way with soap and water.

ADHESOL is a solution of 350 parts of copal, 30 parts of benzoin, 30 parts of tolu balsam, 20 parts of oil of thyme, and 3 parts of alpha-naphthol, in 1000 parts of ether, recommended as an antiseptic paint in treating diphtheritic sore-throat, tuberculous ulcers, etc.

ADIPATUM is an ointment base consisting, according to reports, of lanolin, petrolatum, paraffin and water.

of the magazine, please address it to: McGraw-Hill & Co., Dept. 1010. The article is classified under Engineering.

The following is a list of the names of the persons who have been employed by the Government of the District of Columbia, in the office of the District Engineer, from the year 1800 to the present time, in the order of their appointment:

[illegible]

1. The first part of the document is a list of names and addresses, which are arranged in two columns. The names are written in a cursive script, and the addresses are written in a more formal, printed style. The list includes names such as "John Smith", "Mary Jones", and "Robert Brown", along with their respective addresses.

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THE UNIVERSITY OF CHICAGO

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一、研究目的：本研究旨在探討不同年齡組之青少年，在參與戶外活動時，其對自然環境之認知與態度之差異。並分析影響其認知與態度之因素，以期為戶外教育之實施提供參考。

[illegible]

2. Name and title of the person who is the subject of the report.

AFERMOL is the dry serum of the blood of horses. It is put forward as a dusting powder in purulent wounds.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

AFRIDOL BLUE and **VIOLET** are two benzidine dyes employed as remedies in the sleeping sickness.

A—F—SAL is the new fanciful cognomen applied to the article formerly known as *urasol*, and described under the latter title.—Mfrs.: Organic Chem. Mfg. Co., Philadelphia, Pa.

AFTANIN is a brownish liquid said to consist of a vegetable infusion containing 5 per cent of glycerin and 1½ per cent. of formaldehyde. It is used for foot-and-mouth disease of cattle. See caution under *formaldehyde*.

AGAR-AGAR is a substance extracted in the East Indies from various seaweeds. It consists chiefly of gelose, and is odorless and tasteless, insoluble in cold water but soluble in hot water. Up to quite recently it was used only as a culture medium analogous to gelatin. Latterly it has been employed as a demulcent and for the treatment of constipation; it absorbs water in the stomach and intestines and forms a jelly, which being indigestible increases the bulk of the feces. Dose, 75 to 240 grains, administered in substance coarsely comminuted and mixed with food.—Supplied by all wholesale druggists.

AGARASE is the name applied to tablets said to contain agar-agar and Bulgarian lactic-acid bacilli culture. The article is intended for use as an antizymotic and bactericide in gastro-intestinal affections. Marketed only as tablets, the dose of which is 3 with each meal.—Mfrs.: F. Uhlmann-Eyraud, Geneva, Switzerland.

AGARICIN, in the pure state identical with *agaricic*, *agaricinic*, or *laricic acid*, and also known as *laricin*, is the active constituent of white agaric (*polyporus officinalis*, *boletus laricis*). It occurs as a white or yellowish powder almost insoluble in water but soluble in alcohol or alkali solutions. It is recommended as a remedy for the night-sweats of phthisical subjects. Dose ¼ to 1 grain; maximum dose, 1½ grains. (Nonproprietary.)

AGAROMA, an agar-agar preparation introduced as a laxative in atonic constipation.

AGATHIN (*salicyl-alpha-methyl-phenyl-hydrazone*) results from the interaction of molecular equivalents of asymmetrical methylphenylhydrazin and salicylic aldehyde. It forms yellowish or whitish crystals that are soluble in alcohol or ether but insoluble in water. It was introduced some years ago as an antineuralgic and anti-rheumatic. Dose, 2 to 8 grains two or three times daily. It should be kept in the dark.—Mfrs.: Meister, Lucius & Brünig, Hoechst-on-M., Germany; agts.: V. Koechl & Co., New York.

AGNIADIN is a glucoside recently introduced as a remedy for intermittent fever. It is believed to be identical with *plumiarid*. Dose, 2 to 4 grains.

AGOPYRIN is an influenza remedy marketed in tablets containing 0.025 gram each of cinchonine sulphate and ammonium chloride, and 0.25 gram of salicin.

AGURCARINA is a trade name for *saccharin*.

AGURIN is the terse name for *theobromine-sodium and sodium acetate*, $C_7H_7N_3O_2Na + NaC_2H_3O_2$. It occurs as a white, hygroscopic alkaline powder, containing 60 per cent. of theobromine, readily soluble in water and decomposed by acids, including atmospheric carbonic acid. It is incompatible also with saccharine, mucilaginous liquids and most of the alkaloidal reagents. It is employed as a pure diuretic said to be without action upon the heart—chiefly in dropsy of cardiac origin. Dose, 5 to 15 grains three or four times a day, usually in peppermint water, or as capsules or tablets. It must be kept securely stoppered and in a dry place, and its solutions freshly prepared. Rubbed with chloral hydrate, carbolic acid or piperazin, agurin yields a mass.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

AIODIN (*aiodon*) is an odorless and tasteless dry preparation of the thyroid gland, 1 part of which represents 10 parts of the fresh gland and contains 0.4 per cent. of iodine. It is marketed also in 0.1, 0.3 and 0.5 gram pastils, and is used in myxedema, cretinism, obstinate psoriasis, etc.

AIROL, formerly marketed also as *airoform* and *airo-gen* is *bismuth oxyiodogallate*. It results from the action of hydriodic acid upon bismuth subgallate or of gallic acid upon freshly-precipitated bismuth oxyiodide. It is a grayish-green, very bulky, impalpable, odorless, insoluble powder, containing 20 per cent. of iodine. Its principal employment is as in an odorless substitute for iodoform in wounds, ulcers, abscesses, burns, etc., but it is also used in various ocular, naso-pharyngeal, gynecological, and venereal diseases. It has a strong drying action which is wanting in iodoform. It is prescribed pure or mixed with talcum, boric acid, and the like; also in 5 to 20 per cent. ointments, pastes, or suspensions (in equal parts of glycerin and water). Airol should be kept in a dry place and away from light. It is incompatible with calomel, tending to form red mercuric iodide therewith.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle, Switzerland, and New York.

AJACOL is described under *guaiacol*, with which it is identical.

AJAVUL is another name for *horta*. It is said to be an aqueous alcoholic extract of peru balsam and malt extract.

AKARALGIA is a granular effervescent laxative, antirheumatic and analgesic, based on a favorite prescription

of Dr. B. K. Rachford for migraine. Each full dose represents dried sodium sulphate 30 grains, sodium salicylate from natural ("true") salicylic acid 10 grains, magnesium sulphate 50 grains, lithium benzoate 5 grains and tincture nux vomica 3 minims.—Mfrs.: Wm. S. Merrell Chem. Co., Cincinnati, O.

ALABONE'S INHALANT is said to contain liquid tar, oil of turpentine, peru balsam, compound tincture of benzoin and other ingredients.

ALAPURIN is a pure grade of wool fat, of a light color and non-pronounced odor.—Mfrs.: Nordeutsche Woll-kämmerei, Bremen; agts.: V. Koechl & Co., New York.

ALAXA is said to be an aromatic elixir of cascara sagrada.—Mfrs.: Burroughs, Wellcome & Co., London and New York.

ALBACIDS are substituted albumins containing bromine, chlorine, and iodine respectively. See *bromalbacid*, *chloralbacid* and *iodalbacid*.

ALBARGIN (*gelatose-silver*) is a compound of gelatose with silver nitrate, occurring as a voluminous, yellowish powder containing from 13 to 15 per cent. of silver and readily soluble in water. It is incompatible with tannin and chlorides. Its chief employment is in gonorrhea, though it is also used in infectious eye diseases, bladder trouble, and membranous colitis; usually in 0.1 to 0.2 per cent. solutions, though sometimes a 2 per cent. solution is prescribed, or 10 to 20 per cent. glycerin solutions. It is also marketed in 3-grain tablets. Distilled water should preferably be used in making solutions, and these should be dispensed in dark-amber or black bottles. If ordinary water is used, the water should gradually be added to the albargin with gentle shaking, and not the reverse lest the solution become turbid.—Mfrs.: Meister, Lucius & Brünning, Hoechst-on-M.; agts.: V. Koechl & Co., New York.

ALBIN is a tooth paste containing hydrogen peroxide.—Mfrs.: Pearson & Co., Hamburg, Germany; agts.: Lehn & Fink, New York.

ALBIODINE is a 12½ per cent. solution of iodine in a glycerin base. It is claimed to be neutral, soluble in water, non-irritating and without action on starch. It is employed as a succedaneum for the alkali iodides, hypodermically, internally or endermically.—Mfr.: Dr. J. L. Marbourg, Seattle, Wash.

ALBOFERRIN is an iron-albumin preparation occurring as a light-brown, almost tasteless and odorless powder, soluble in water and containing 0.68 per cent. of iron, 0.324 per cent. of phosphorus, and 90.14 per cent. of albumin. It is intended as a hematinic.—Mfrs.: Drs. Fritz & Sachsse, Vienna, Austria.

ALBOPIXOL is a superfatted white tar soap intended as a dermic.—Mfr.: Dr. Bergmann, Waldheim, Germany.

ALBULACTIN is "milk albumin as it exists in the natural milk, chemically pure and soluble in water." It is used as an addition to cow's milk in the preparation of modified milk for infant feeding, to make up for the deficiency of albumin.—Mfrs.: J. A. Wülfing, Berlin, Germany; agts.: Bauer Chem. Co., New York.

ALBUMIN BROMIDE is the unscientific designation applied to a brand of the substance better known by the name *bromalbacid*; and *albumin iodide* is the cognomen adopted for the same firm's analogue of *iodalbacid*.

ALBUMIN, FERRATED, is a preparation marketed in Switzerland as a succedaneum for *ferratin*.

ALBUMIN IODOFORM is a Swiss preparation, employed as a vulnerary like iodoform.

ALBUMIN SULPHOICHTHYOLATE is a Swiss surrogate for the Hamburg *ichthalbin*.

ALCARNOSE is a readily soluble nutrient said to contain in a predigested form all the substances necessary for the nourishment and invigoration of the body; albumoses 23.6 per cent., fat emulsified 17.7 per cent., maltose and dextrin 55.3 per cent., salts 3.4 per cent. It is a light-brown powder of pleasant odor and taste. Dose, 1 to 3 tablespoonfuls, in hot milk or soup.—Mfrs.: J. D. Riedel Co., Berlin and New York.

ALCHO is the name recently given to *aluminium carbonate*.

ALCOHOL, AMYLIC, TERTIARY.—See *amylene hydrate*.

ALCOHOL, CETYLIC, also known by the trade name of *athol* (*ethol*) and the chemical designations normal primary *hexadecyl alcohol* and *palmityl alcohol*, though not a new product has only in recent years come to the fore as a skin emollient in chaps, prurigo, and weeping eczema. It forms white crystals soluble in alcohol and ether. It is generally used mixed with boric acid in proportions varying from equal parts to 1 in 5. It is derived from spermaceti by saponification with potash.—Mfrs.: E. Merck, Darmstadt, Germany, and others.

ALCOHOL-SILVER OINTMENT consists of 0.5 per cent. of collargol, 70 per cent. of alcohol, soda soap, wax and a little glycerin, and is recommended by Löwe as the best form for using colloidal silver (collargol), because the hyperemia caused by the alcohol considerably increases the absorbing power of the skin and thus enhances and hastens the action of the drug. It is used in infectious inflammations, old ulcers of the leg, severe burns, chronic eczema, etc.—Mfrs.: Fabrik Helfenberg, Helfenberg near Dresden; agts.: C. Reinschild Co., New York.

ALDESAR.—See under *nebulates*.

ALDTHYFORM is defined as a 25 per cent. solution of thymol with 10 per cent. of formaldehyde used as a dis-

infectant. See caution under *formaldehyde*.—Mfrs.: Chem. Works "Hansa," Hemelingen near Bremen, Germany.

ALEPTONE is the name given to iron-manganese tablets intended as a cheap substitute for solution of iron and manganese peptonate. *P-aleptone* contains colloidal iron and manganese peptonized, and *s-aleptone* consists of colloidal iron and manganese saccharate. Each tablet contains 0.05 gram of iron and 0.008 gram of manganese.—Mfrs.: Chem. Fabrik Helfenberg, Helfenberg near Dresden; agts.: C. Reinschild Co., New York.

ALEURONAT is a by-product in the manufacture of wheat starch, introduced as a dietetic. It is marketed also as soup aleuronat, a tablespoonful of which in a cup of water yields a soup; and as tannin-aleuronat, mildly astringent and hence employed for cholera infantum and chronic intestinal catarrh.—Mfr.: R. Hundhausen, Hammi, Germany.

ALEURONAT FLOUR is a vegetable albumin used in the preparation of diabetic bread, and in surgery, owing to its intense chemotactic action upon leucocytes, to bring about union of severed surfaces. It occurs as a yellowish-white, tasteless powder.—Mfr.: as above.

ALEXINE is a synonym of *tuberculocidin* (Klebs).

ALEXIPON is the trade name applied to *acetyl-salicylic acid ethyl ester*, the substance being put forward as an antirheumatic.—Mfr.: G. Richter, Budapest, Hungary.

ALFORMIN is essentially a concentrated solution of basic formate of aluminium $Al_2(OH)_2(HCOO)_4$. It contains about 14 per cent. of the latter and 3 per cent. of free formic acid, and is offered as an astringent and antiseptic similar to the N. F. solution aluminium acetate.—Mfr.: Max Elbe, Dresden, Germany.

ALGARINE (*nyrdal*) is the name applied to sugar granules prepared from sea weeds, a teaspoonful of which is said to contain 0.01 gram of iodine compound. The product is put forward as a substitute for cod liver oil.—Mfr.: Pharmacie Moride, Paris, France.

ALGIDINE is the name adopted to designate an inorganic poultice composed of kaolin, combined with glycerin and eucalyptol, menthol, thymol and boroglyceride.—Mfr.: Wm. S. Merrell Chem. Co., Cincinnati, O.

ALGINOIDS are metallic salts of alginic acid, $C_{76}H_{20}N_2O_{22}$, discovered by Stanford some years ago. Only the *iron* alginoid or alginate has been used therapeutically. In the dry state this is a brown, tasteless, insoluble powder, containing about 10 per cent. of iron, and recommended by the introducer as an easily assimilable and non-irritating hematinic in doses of 2 to 10 grains. The trade name *alginon* has latterly been adopted for it.—Mfrs.: Evans, Sons, Lescher & Webb, Liverpool.

ALKALOIDAL OILS are aseptic solutions of atropine, cocaine, eserine and pilocarpine, respectively, in olive oil.

ALKASAL is the name applied to *aluminium and potassium acetate*, used as an antiseptic and astringent.—Mfrs.: Athenstaedt & Redeker, Henbelingen, Germany; agts.: Lehn & Fink, New York.

ALKASODYL is another brand name for *sodium cacodylate*—Mfr.: Apotheker Wewiorski, Vienna, Austria.

ALKATHYPTOL (*liquor eucalypti compositus alkalinus*) is an alkaline solution analogous to the National Formulary *Liquor Antisepticus Alkalinus*—Mfr.: John Wyeth & Bro., Philadelphia, Pa.

ALLOPHANATES of a number of organic substances are described by Dr. Overlach as valuable additions to the *materia medica*. Allophanic acid, $\text{NH}_2\text{CO.NH.CO}$, is without therapeutic action but possessing the peculiar chemical property of combining with certain liquid drugs to form dry compounds, which are claimed to be devoid of the disagreeable taste, odor or irritating properties of the active constituents in the free state. In the system allophanic acid is split up into carbonic acid and urea.—Mfrs.: Zimmer & Co., Frankfurt-on-M., Germany; agts.: C. Bischoff & Co., New York.

ALLOSAN is the *allophanic acid ester of santalol*, or *santalol allophanate*, containing 72 per cent. of santalol. It is offered as a tasteless succedaneum for oil of sandalwood. (See also the article on *allophanates*.)—Mfrs.: Zimmer & Co., Frankfurt-on-M., Germany; agts.: C. Bischoff & Co., New York.

ALLYL SULPHOCARBAMIDE is a synonym of *thiosinamin*.

ALLYLSULPHOCARBAMIDE (THIOSINAMINE) BISMUTH TRIIODIDE is described as a chemical compound of thiosinamine and bismuth triiodide, having the formula $(\text{C}_3\text{H}_5)_3\text{N}_2\text{H}_2\text{CS.BiI}_3$. The drug is red, resinous in appearance; it is insoluble in water and weak mineral acids, and decomposed gradually by weak alkalis. It is soluble in alcohol, ether or chloroform with decomposition. It is introduced as a succedaneum for thiosinamine, with less irritating action on the mucosæ. Dose, 1 to 2 grains during the day with meals, as triturates named "cirrhohysin," each of which contains 1/10 grain of the drug.—Mfr.: Anglo-American Pharmaceutical Co.; agts.: E. Fougere & Co., New York.

ALMATEIN is a condensation product of hematoxylin and formaldehyde, of the formula $\text{CH}_2\text{O}_2 : (\text{C}_{10}\text{H}_{12}\text{O}_6)_2 : \text{CH}_2$. It forms a light, odorless and tasteless powder of a light red to brownish-red color, and soluble in alcohol and glycerin, but insoluble in water; decomposed by alkalis. It has been used as an intestinal antiseptic and astringent,

as well as dusting-powder for wounds.—Mfr.: E. Merck, Darmstadt; agts.: Merck & Co., New York.

ALMOZOIN is a product exploited "for making complexion jelly." According to an analysis made at the chemical laboratory of the American Medical Association, it consists essentially of tragacanth 40 per cent., sodium borate 40 per cent. and magnesium carbonate 20 per cent.—Mfr.: H. S. Peterson & Co., Chicago, Ill.

ALOIN-FORMAL.—See *formaloin*.

ALOKATHOL is a liquid tonic and stomachic, containing calisaya, cascara, kola, bitter orange peel, gentian, pepsin, iron and aromatics. Dose, a teaspoonful.—Mfrs.: Tilden Co., New Lebanon, N. Y.

ALOPHEN pills are said to be a combination of aloin, strychnine, extract of belladonna leaves, powdered ipecac, and phenolphthalein. They are employed as a laxative.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

ALPHA-BROMISOVALERIANIC ACID ESTER.—See *eubornyl*.

ALPHA-GUAIACOL is synthetic crystalline guaiacol.

ALPHA-NAPHTOL SALICYLATE, or ALPHA-NAPHTOL SALICYLIC ACID ESTER, is better known as *al-phenol*, which see.

ALPHOL (*alpha-naphthol salicylate*, or *alpha-naphthol salicylic acid ester*), $C_{10}H_7(OH)COO.C_{10}H_7$, results from heating alpha-naphthol-sodium and sodium salicylate with phosphorus oxychloride. It is a reddish-white crystalline powder, soluble in alcohol, ether, and fatty oils. It is employed as an internal antiseptic in gonorrheal cystitis, summer diarrheas, typhoid fever, etc., and in rheumatism. Dose, 1 to 15 grains several times daily. It is prone to darken with age and exposure.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ALPHOZONE is the trade name applied to *succinic peroxide* or *disuccinyl peroxide* $(COOH.CH_2.CH_2.CO)_2O_2$. The article occurs as a white, fluffy powder, having a characteristic taste that is described as not unpleasant in dilutions, soluble on agitation in 30 parts of water, stable, and non-explosive. It is employed as a germicide and antiseptic; externally on wounds or ulcers, in tonsillitis, leucorrhea, etc.; internally in typhoid fever, infectious diarrhea, abnormal fermentation and like intestinal disturbances. Dose, 1 grain. Marketed also as 1-grain tablets, which are used not only internally, but also for preparing disinfectant solutions (1 tablet in 2 fl oz. water).—Mfrs.: F. Stearns & Co., Detroit, Mich.

ALSOL is a trade name for *aluminium acetotartrate*, as made by Athenstaedt & Redeker, Hemelingen, Germany; agts.: Lehn & Fink, New York. Also marketed as 50-per cent. solution.

ALSOL CREAM is an antiseptic vulnerary ointment containing as its medicinally active ingredient aluminium acetotartrate.—Mfrs.: Athenstaedt & Redeker, Hemelingen, Germany; agts.: Lehn & Fink, New York.

ALSTONINE.—See *chlorogenine*.

ALUMFORMASAL is the aluminium salt of methylene-disalicylic acid (formasal), used chiefly as an astringent dusting powder in naso-pharyngeal catarrh and ozena. See caution under *formaldehyde*.—Mfrs.: Organic Chem. Co., Philadelphia, Pa.

ALUMINIUM ACETOFORMATE, BASIC. — See *formeston*.

ALUMINIUM ACETOTARTRATE, also known as *alsol*, is an astringent and disinfectant employed in $\frac{1}{2}$ to 2 per cent. solutions as a nasal douche in affections of the respiratory tract, in 1 to 3 per cent. solutions as a substitute for solution of aluminium acetate, in concentrated solution as a lotion in frost-bite and balanitis, and as a snuff with boric acid in ozena. It occurs as colorless or yellowish crystals, freely but exceedingly slowly soluble in water, and insoluble in alcohol and ether.—(Nonproprietary.)

ALUMINIUM BOROFORMATE $\text{Al}_2\text{O}_3 \cdot \text{BO}_2 \cdot \text{H}_2\text{O} \cdot \text{H}_2\text{CO}_3 + 5\text{H}_2\text{O}$, may be obtained by dissolving alumina in a solution of 2 parts of formic acid and 1 part of boric acid, evaporating and crystallizing. Used as a disinfectant. There is risk in formates it must be noted, if used medicinally, as formic acid is probably the ultimate cause of blindness and death from wood alcohol, being formed from that in the system. See caution under *formaldehyde*.

ALUMINIUM CARBONATE, $\text{Al}_2(\text{CO}_3)_3$, also known as *alcho*, it was hitherto impossible to prepare in a way that it would not immediately become decomposed into aluminium hydrate and carbon dioxide. Gawalowski has now succeeded in making a stable carbonate. This occurs as a chalky, white, readily pulverizable, tasteless substance, and has been recommended as a mild styptic, astringent, and antidiarrheal, in hematemesis, excessive perspiration, skin diseases, etc., analogous to aluminium acetate, burnt alum, etc. Dose, 5 to 15 grains.

ALUMINIUM CASEINATE is a product obtained by adding solution of aluminium acetate to milk freed from albumin and sterilized. It forms a yellowish, tasteless, insoluble powder, and is employed as an intestinal astringent. Dose, 3 to 5 grains.

ALUMINIUM GALLATE is described under *gallai*.

ALUMINIUM NAPHTHOLSULPHONATE. See *aluminol*.

ALUMINIUM SALICYLATE, $(\text{C}_6\text{H}_4 \cdot \text{OH} \cdot \text{COO})_3 \cdot \text{Al}_2 + 3\text{H}_2\text{O}$, also known by the trade name *salumin*, occurs as a reddish-white powder, insoluble in water or alcohol but soluble in alkalis and ammonia. It is prescribed as a dust-

ing-powder in nasal and laryngeal catarrhs, particularly in ozena.—Mfrs.: J. D. Riedel Co., Berlin and New York.

ALUMNOL (*aluminium beta-naphthol-sulphonate*). $[C_{10}H_7OH.(SO_3)_2]_2Al_2$, is obtained by the interaction of barium beta-naphthol disulphonate and aluminium sulphate; a white or pinkish powder, readily soluble in water or glycerin but sparingly soluble in alcohol. Its action is that of an astringent antiseptic, and it is used chiefly in gonorrhea ($\frac{1}{2}$ to 2 per cent. solutions), leucorrhea (in 1 to 5 per cent. solutions), as a dusting-powder in the nursery (1:4 to 1:9 of talcum or starch), and in abscesses (10 per cent. solution). It has also been employed in nose-bleeding, certain inflammatory skin diseases, purulent wounds, etc. Its aqueous solutions are incompatible with alkaline liquids, solutions of ammoniacal compounds, or silver salts.—Mfrs.: Meister, Lucius & Brünig, Hoechst-on-M.; agts.: V. Koechl & Co., New York.

ALYPIN is a new substitute for cocaine hydrochloride as a local anesthetic. According to Drs. E. Impens and F. Hofmann, it is equally active but less toxic than cocaine, causes no mydriasis nor vaso-constriction (on the contrary, vaso-dilatation), and its solutions bear boiling for from five to ten minutes without decomposition. Chemically it is defined as *benzoyldimethylaminomethylidimethylaminobutane hydrochloride*. It is a white crystalline, hygroscopic, bitter powder, melting at $169^\circ C.$, and freely soluble in water and alcohol, yielding neutral solutions that can be sterilized by boiling for not over five minutes. Alypin is employed mostly in 2 to 4 per cent. solution, just like cocaine hydrochloride.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

ALYPIN NITRATE is the nitrate of benzoyltetramethyldiaminoethylisopropyl alcohol, intended for use instead of regular alypin (the hydrochloride of the same base) in combination with silver nitrate, in which case the hydrochloride salt would be incompatible. It occurs as a white, crystalline powder melting at $159^\circ C.$, readily soluble in water, alcohol, and chloroform and sparingly soluble in ether.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld, (Germany) and New York.

AMAROL is a carminative and cathartic similar to ingestol. It is stated to consist of magnesium sulphate 1.5 parts, sodium sulphate 0.5 part, potassium sulphate 0.1 part, calcium sulphate 0.1 part, magnesium chloride 0.5 part, sodium chloride 0.75 part, sodium carbonate 0.05 part, magnesium bromide 0.001 part, calcium carbonate 0.25 part, silicic acid, ferric oxide and ferric citrate of each 0.001 part, spirit of ether 0.5 part, glycerin 1.3 parts and aromatic water 100 parts. Dose, 1 to 2 tablespoonfuls; children in proportion.—Mfr.: S. Rucker, Lemberg, Germany.

AMENYL is defined as *methylhydrastimide hydrochloride*, and occurs as yellow needles soluble in hot water. It is intended for use in amenorrhea and other menstrual disturbances. Dose, $\frac{3}{4}$ to $1\frac{1}{2}$ grains twice daily.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

AMIDIN.—See *holocaine*.

AMIDOAZOTOLUOL is prepared from scarlet R and is used like the latter as an agent for forming epithelium in wounds, etc. When chemically pure it is a yellow powder insoluble in water but readily soluble in alcohol or ether.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

AMIDOAZOTOLUOL MEDICINAL is a pure grade of this azo dye, which Dr. Hayward considers the active constituent of scarlet red which has lately been found therapeutically serviceable and which is said to be the active ingredient of Prof. Schmieden's Scarlet R ointment. It occurs as a reddish-brown, crystalline powder, which turns yellow when rubbed up in a mortar. An ointment made with it is marketed under the name of "Scharlach Salbe" (scarlet ointment).—Mfr.: Actiengesellschaft für Anilinfabrikation, Berlin, Germany; agts.: Lehn & Fink, New York.

AMIDO-PARA-PHENETIDIN ACETYLSALICYLATE.—See *aspirophen*.

AMIDO-PARA-PHENETIDIN CITRATE.—See *citrocoll*.

AMIDOPHENACETIN ACETYLSALICYLATE. — See *aspirophen*.

AMIDOPYRIN is the same as *pyramidon*.

AMIDOPYRINE BUTYRATE is an analogue of *trigemin*.

AMINOFORM is one of the many trade names for *hexamethylenetetramine*.—Agts.: C. Bischoff & Co., New York.

AMINOL is a disinfectant and deodorizing liquid said to consist of calcium hydrate, sodium chloride, and trimethylamine.

AMINOPYRINE is an antipyretic and analgesic of undivulged composition. It is made by a St. Louis firm, but is also marketed in capsules presumably of French origin.

AMIOTONE is an alterative dietetic prepared from sea weeds rich in bromine; a fine, yellowish powder, partly soluble in water.

AMMONIO-FORMALDEHYDE is one of the many synonyms of *hexamethylenetetramine*.

AMMONIUM EMBELATE, $\text{NH}_4\text{C}_6\text{H}_5\text{O}_2$, is the ammonium salt of the acid contained in the fruit of *embella ribes*. It is a grayish-violet powder, soluble in diluted alcohol. It is used as a teniafuge, chiefly in children, in the dose of 3 grains with syrup or honey, preceded for three days by a milk diet and followed by a dose of castor oil.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

AMMONIUM FLUORIDE was recommended a few years ago by Dr. Lucas in enlargement of the spleen, and later also in goiter and flatulent dyspepsia. It is given in doses of $\frac{1}{4}$ to $\frac{3}{4}$ grain after meals, either in pills, or (more frequently) well diluted in solution (10 grains in 6 oz.; a teaspoonful to a tablespoonful for a dose). Only the purest, medicinal or arsenic-free quality should be dispensed on prescriptions.—(Nonproprietary.)

AMMONIUM ICHTHYOLSULPHONATE.—See *ichthyol*.

AMMONIUM SULPHOICHTHYOLATE.—See *ichthyol*.

AMMONIUM SULPHOBITUMINOLATE.—See *bituminol*.

AMMONIUM SUPHOLEATE is what a Bremen pharmacist calls his analogue of *ichthyol*.—Mfr.: H. Peschen, Bremen, Germany.

AMMONOL is a composite antipyretic and analgesic, consisting, according to reports from the chemical laboratory of the American Medical Association, essentially of acetanilid, 50 parts, sodium bicarbonate, 25 parts, ammonium carbonate, 20 parts, and traces of mentanil yellow. It forms a white powder, only partly soluble in cold water or alcohol. When rubbed dry with resorcin, thymol, carbolic acid, or chloral, hydrate, it yields a mass or a liquid, according to the proportions used. Dose, 5 to 15 grains.—Mfrs.: Ammonol Chem. Co., New York.

AMMO-PHENIN is an "ammoniated phenylacetamide"—a mixture analogous to ammonol, antikamnia, etc. Dose, 5 to 10 grains.—Mfrs.: Ammo-phenin Chem. Co., St. Louis, Mo.

AMOLIN is an antiseptic and deodorant which, according to analyses in the chemical laboratory of the American Medical Association, is said to consist of 99 per cent. of boric acid with about 1 per cent. of thymol.—Mfr.: Amolin Chem. Co., New York.

AMSCO SALTS is "an effervescent combination of lithium, sodium sulphate and phosphate, with potassium carbonate." It is used as a laxative and antacid, in biliousness, constipation, heartburn, rheumatism, etc. Dose, a teaspoonful.—Mfrs.: Amer. Med. Supply Co., Brooklyn, N. Y.

AMYGDOPHENIN (*ethyl-amygdophenin*, *phenetidin mandelate*) occurs as a grayish-white powder or leaflets, easily soluble in alcohol, sparingly so in water. It was introduced as an analgesic and antirheumatic, claimed to be free from by-effects; but it has latterly not been reported on, and is not now obtainable in this market. Dose, 15 grains.—Mfrs.: Meister, Lucius & Brünig, Hoechst-on-M., Germany; agts.: V. Koechl & Co., New York.

AMYL SALICYLATE was recently brought to the fore as a remedy in acute and subacute rheumatism by a French physician, Dr. M. B. Lyonnet, under the name

amyleneol. It is a faintly yellowish liquid of salol-like odor; soluble in alcohol, ether, or chloroform, but insoluble in water. Externally 30 to 45 minims are painted on the affected joint and this dressed with impervious material so as to prevent too rapid evaporation; internally 30 minims are given in the course of a day, in capsules generally. According to Hénou, it also acts well applied externally in hepatic colic.

AMYL VALERATE, $C_{10}H_{20}O_2$, is the iso-valerianic ester of iso-amyl alcohol; a colorless liquid having when dilute an odor of apples. It is soluble in alcohol, chloroform or ether, insoluble in water. Its specific gravity at 15° C. is about 0.858. It has been used in the treatment of gall stone colic. Dose, 3 to 6 minims in capsules, three times daily.—Mfr.: E. Merck, and others.

AMYLARIN is *iso-amyl-trimethylammonium chloride*, which according to C. Jacoby, is a toxic substance combining the action of curare and muscarine. Further data are wanting.

AMYLENE HYDRATE, chemically known also as *tertiary amyl alcohol* and *dimethyl-ethyl-carbinol*, is a light, colorless, oily, hygroscopic liquid, of ethereo-camphoraceous taste and odor, soluble in about 8 parts of water and miscible with alcohol, ether, or chloroform in all proportions. It was introduced by Prof. von Mering as a hypnotic and a nerve sedative, half as powerful as chloral hydrate and claimed to be less dangerous. Dose, 30 to 90 minims, usually prescribed in aqueous solution with extract of licorice.—(Nonproprietary.)

AMYLENOL is a French name applied to *amyl salicylate*.

AMYLOCARBOL is a disinfectant fluid reported to be a mixture of crude carbolic acid, green soap, amyl alcohol, and water.

AMYLODIASTASE is described as "a syrup containing the natural diastases of barley and its assimilable phosphates." It is offered for use in gastric affections, nervous diseases, rachitis, etc.—Mfr.: A. Thépénier, Paris, France.

AMYLOFORM is a condensation product of starch and formaldehyde, occurring as a white, odorless, insoluble powder. It is recommended as a surgical antiseptic, pure or in mixtures with boric acid, etc., just like iodoform. See caution under *formaldehyde*.—Mfr.: Ludwig W. Gans, Frankfurt-on-M., Germany.

AMYLOIODOFORM should not be confounded with amyloform. It is a blackish-blue combination of starch, iodine, and formaldehyde. See caution under *formaldehyde*.

AMYNIN is the name of a ferment obtained from the blood. It is used in organotherapy.

AMYROL is an alcohol obtained by E. Liotard from West Indian oil of sandalwood; an isomer of santalol, and a colorless liquid of the specific gravity 0.980. It is intended as a substitute for the oil, but no clinical data are as yet extant.

ANADOL is a pulverulent antipyretic and analgesic of undivulged composition. According to an analysis made in the laboratory of the American Medical Association, the product consists essentially of acetanilid 79 per cent., caffeine 1 per cent. and sodium bicarbonate 20 per cent. Dose, 5 to 10 grains. Marketed also as 5-grain tablets.

ANÆ names look for under *ane*.

ANALGEN is better known on this market as *quinalgen* and will be described under the latter head.

ANALGESINE is one of the numerous synonyms of *antipyrin*.

ANALGESINE CAFFEINO-CITRATE is *migrainin*.

ANALGIA is a combination similar to antikamnia and the like, used as an antipyretic and analgesic. Dose, 5 to 15 grains.

ANALGINE is an analgesic, antipyretic and nerve sedative, each ounce of which contains acetanilide 219 grains, extract cannabis indica 11 grains, extract hyoscyamus 22 grains, sodium bicarbonate 22 grains, sodium salicylate 22 grains, camphor monobromated 22 grains, caffeine 27½ grains and aromatic powder, q. s.—Mfrs.: H. K. Mulford Co., Philadelphia, Pa.

ANALGOS is a dental local anesthetic consisting essentially of 2 parts each of thymol, menthol, phenol, aspirin, and sodium chloride, and 1 part of cocaine hydrochloride, dissolved in 189 parts of dilute alcohol.—Mfr.: C. Stephan, Dresden, Germany.

ANARCOTINE. See *narcotine*.

ANASARCIN is a diuretic of undivulged composition, beyond the statement that it contains "the active principles of oxydendron arboreum, sambucus canadensis and urguinea scilla." [The active principles of these drugs have not as yet been isolated by scientific chemists.—Ed.]—The article is marketed as an elixir and as tablets.—Mfrs.: Anasarcin Chem. Co., Winchester, Tenn.

ANASPALIN is an ointment base stated to consist of a mixture of wool fat and petrolatum.

ANCODIT is an abbreviated designation for *migrainin*, constructed from the names of the ingredients.

ANDOLIN is a local anesthetic, defined by the manufacturers as "a chemical compound in solution of beta-eucaine and stovaine to which suprarenine hydrochloride has been added in the proportion of 0.00008 gram per cubic centimeter." It is marketed in ampuls.—Mfr.: Andolingesellschaft, Berlin S, Germany.

ANDROGRAPHIS PANICULATA, a Javanese acanthaceous plant, has been proposed as a remedy for the treatment of kidney stones.

ANEDEMIN is the name applied to chocolate-coated tablets said to contain "the active principles of strophanthus, squill and apocynum, with sambucus as adjuvant." The article is advertised as a diuretic.—Mfrs.: Ademin Chem. Co., Winchester, Tenn.

ANEMIN is an iron-pepsin saccharate used especially in anemia attended with dyspepsia.—Mfr.: J. P. Liebe, Dresden, German; agts.: Lehn & Fink, New York.

ANEMONIN or *pulsatilla camphor*, $C_{10}H_{16}O_4$, occurs as yellowish-white crystals, insoluble in water or cold alcohol, and employed as an antispasmodic and anodyne in asthma, whooping cough, orchitis, dysmenorrhea, etc. Dose, $\frac{1}{4}$ to 1 grain twice daily; maximum dose, $1\frac{1}{2}$ grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ANEMORENIN is a solution of the active principle of the suprarenal gland, each 5 c.c. of which contain 0.003 gram of tropa-cocaine and 0.002 gram of salt, and which is recommended by Dr. Möller as a dental anesthetic.

ANEMOSE MILK is a buttermilk preparation containing 0.15 per cent. of ferrous iodide without any aromatics or preservative, and intended as a milk food for the use of anemic patients.—Mfr.: W. Lakemeier, Bonn-on-Rh., Germany.

ANESON or **ANESIN** is a saturated aqueous solution of acetone-chloroform, which was introduced a few years ago as a local anesthetic for use in nasal, laryngeal, and minor surgical operations, but apparently withdrawn from the market since the appearance of the crystalline compound.

ANESTHAINE is a local anesthetic, "each fluid ounce of which contains 5 grains of stovaine with synergistic antiseptics in a sterile solution which may be boiled without impairing its anesthetic value."—Mfrs.: Abbott Alkaloidal Co., Chicago, Ill.

ANESTHESIN is chemically *para-amidobenzoic acid ethyl ester*, $C_6H_4.NH_2.COOC_2H_5$, a white, odorless, tasteless powder, sparingly soluble in water, but readily soluble in alcohol, ether, chloroform, fats or oils. Prof. C. v. Noorden recommends it as a local anesthetic and sedative in gastric hyperesthesia, ulcer or cancer of the stomach, and dysphagia; and it is also used locally in laryngeal tuberculosis, painful hemorrhoids, etc. It is applied pure or mixed with an inert powder, in ointment, alcoholic or ethereal solution, or emulsion, or as suppositories and bougies. Dose, 5 to 10 grains two or three times a day, on an empty stomach, or $\frac{1}{8}$ or $\frac{3}{8}$ grain more frequently (in laryngeal troubles). Anesthesin is marketed also as $2\frac{1}{2}$ grain tablets and in a number of forms and combina-

tions.—Mfrs.: Meister, Lucius & Brünig, Hoechst-on-M.; agts.: V. Koechl & Co., New York.

ANESTHESIN PARA-PHENOLSULPHONATE is the chemical designation for *subcutin*, which see.

ANESTHESIN SULPHOPHENATE or SULPHOPHENYLATE (sulphocarbolate) is a chemical synonym of the anesthetic and analgesic which is better known as *subcutin*.

ANESTHETICUM is a dental local anesthetic said to consist of a 10 per cent. solution of cocaine phenate (carbolate).

ANESTHOL or *anestyle* or *anestile* is a solution of methyl chloride in ethyl chloride, recommended as a local anesthetic in tooth-extraction and for the relief of rheumatic and neuralgic pains. It should not be confounded with the following inhalation anesthetic.—Mfr.: Dr. Speier, Berlin, Germany.

ANESTHOL (Weidig) is the outcome of efforts of improving general anesthesia on the basis of Schleich's principle (adapting the boiling point of the narcotics to the temperature of the body), and is the logical supersedant of Schleich's ether-chloroform-benzin mixtures first advocated about twelve years ago. It is regarded by its introducer, Dr. Weidig, as a chemical combination or "molecular solution," and consists of 17 volumes of ethyl chloride, 35.89 of chloroform, and 47.1 of ether. It is a colorless liquid of agreeable odor, specific gravity, 1.045, and boiling point 104° F. Anesthol has been recommended as an agreeable and relatively safe inhalation anesthetic, usually without untoward after-effect. It is generally administered by the "drop" method; and some physicians give a dose of morphine hypodermically about half an hour before beginning with the anesthetic, and this is said to enhance the action and reduce the quantity required for narcosis.—Mfrs.: Chas. Cooper Co., New York; agts.: Lehn & Fink, New York.

ANESTHONE CREAM "contains 1 part to 20000 of adrenaline chloride, and 10 per cent. paraamidoethyl benzoate, in a bland oleaginous base." It is employed as a local anesthetic and sedative in hay-fever, a portion as large as a pea being snuffed up three or four times a day or more often if necessary. Put up in collapsible tubes with elongated nozzles.—Mfr.: Parke, Davis & Co., Detroit, Mich.

ANESTIFORM is said to be a solution of cocaine hydrochloride, renaglandine and distilled extract of witch-hazel, in a fluid containing the sulphates of sodium and ammonium. It is marketed in small tubules styled "aseptules."—Mfrs.: Oppenheimer, Son & Co., London E. C.

ANESTILE.—See *anesthol*.

ANESTOL is an anesthetic balm for local application in neuralgia, headache, and the like. It doubtless consists

essentially of menthol and methyl salicylate, in a readily penetrating ointment base.—Mfr.: Norwich Pharmacal Co., Norwich, N. Y.

ANGIONEUROSIN is *nitroglycerin*.

ANILIN SULPHATE occurs in white crystals soluble in water and alcohol. It has been employed as a nervine in chorea and epilepsy, and as an analgesic and deodorant in carcinoma. Dose $\frac{3}{4}$ to $1\frac{1}{2}$ grains, and up to 6 grains a day. It is quite poisonous.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ANILIPYRIN is an antiseptic and analgesic prepared by melting together 376 parts of antipyrin and 135 parts of acetanilid. It occurs as a white powder, readily soluble in water, and is employed chiefly in grip, articular rheumatism, and neuralgias. The dose is 5 to 10 grains which may be given three or four times daily. An *alpha*- and a *beta*-anilipyrin are distinguished.—Mfrs.: Gilbert & Yvon, Paris, France.

ANIODOL is a French disinfectant reported to consist of formaldehyde, glycerin, tincture of mustard, alcohol and water. See caution under *formaldehyde*.

ANISOTHEOBROMINE (*theobromine-sodium* and *sodium anisate*), $C_7H_7N_3O_2Na.C_6H_4.OCH_3.COONa$, occurs as a white, odorless powder having a saline-bitter taste, slightly soluble in water or alcohol, and insoluble in ether or chloroform. It contains 47.87 per cent. of theobromine. Its solutions are alkaline and readily acted upon by atmospheric carbonic acid gas. It is used as a diuretic. Dose, 8 to 15 grains several times a day.—Mfrs.: G. Hell & Co., Troppau, Austria.

ANNIDALIN is a synonym of *aristol* (thymol iodide).

ANODYNICUM is, according to Jungclaussen, a wool fat-ointment containing acetanilid.—Mfrs.: Evens & Pistor, Düsseldorf, Germany.

ANODYNIN is another synonym of *antipyrin*.

ANODYNONE is a trade name of *ethyl chloride*.

ANORRHAL suppositories are said to contain sodium sozoiolodate $\frac{1}{3}$ grain, extract of witch hazel distilled $7\frac{1}{2}$ minims, zinc oxide 6 grains, alumnol $2\frac{1}{5}$ grain, and extract of suprarenal gland $1\frac{1}{30}$ grain. They are put forward as a remedy in hemorrhoids.—Mfr.: Apotheke "Zur Austria," Vienna.

ANOZOL is described as powdered iodoform mixed with thymol. It is used like iodoform.

ANSAL is a fanciful name for *antipyrine salicylate* (salipyrine), formed from the two first syllables of the chemical designation.—Mfrs.: G. & R. Fritz-Petzold & Süß, Vienna, Austria.

ANTACETIN is a trade designation for *calcium saccharate*.

ANTASTHMOL "contains besides the anesthetic anesthesin, the specific atropine, introduced by means of a distillation process together with the products of combustion of a mixture of saltpetre, stramonium and belladonna, into an oily liquid for inhalation." It is used in an atomizer for paroxysms of bronchial asthma, and on cotton tampons introduced into the nostrils in cases of hay fever.—Mfr.: Dr. Ritisert of Berlin; agts.: C. Bischoff & Co., New York.

ANTEMESIN is the fanciful designation for capsules containing $1\frac{1}{2}$ grains of anesthesin and hence used as an anodyne in gastric ulcer, nervous dyspepsia, etc.—Mfr.: Chem. Institute in Berlin, S. W.

ANTHEOL is defined as "a pyroligneous distillate containing 5 per cent. of chemically combined sulphur. The exact chemical constitution of antheol, like other tarry distillates, has not been accurately determined." It is introduced for use as an antiphlogistic, antipruritic dermic, analogous to ichthyol.—Mfr.: Vial, Paris; agts.: E. Fougere & Co., New York.

ANTHRAGLUCORHAMNIN, ANTHRAGLUCORHEIN, ANTHRAGLUCOSAGRADIN, and ANTHRAGLUCOSENIN are glucosides isolated by Tschirch from frangula, rhubarb, cascara sagrada and senna respectively. They all occur as brown powders that are soluble in alcohol, and possess cathartic action; dosage statements are wanting.

ANTHRAROBIN (*anthro-arobin*, *dioxyanthranol*, *leuco-alizarin*) is obtained from alizarin by reduction with zinc dust. It forms a yellowish granular powder, soluble in hot alcohol and in solutions of the alkalies, and was introduced as a substitute for chrysarobin in psoriasis, herpes and other skin diseases. It is generally prescribed in 10 to 20 per cent. ointments; sometimes in alcoholic solution.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ANTHRASOL is described as a purified and decolorized coal tar; coal tar freed from pitch, pyridine bases and coloring matter. It occurs as a light-yellowish oil of tarry odor, soluble in about 20 parts of 90 per cent. alcohol, and miscible in all proportions with absolute alcohol, acetone, fatty oils, liquid paraffin, or vasogen. It is said to penetrate the skin readily and thus has a deep action, to have more marked antipruritic effect than ordinary tar, and to be less irritating. It is used in skin diseases, in place of common tar, in 5 to 30 per cent. ointments or alcoholic solutions.—Mfrs.: Knoll & Co., Ludwigshafen-on-Rh. and New York.

ANTHRASOLIN is a glycerin soap containing 20 per cent. of anthrasol and employed chiefly in skin diseases of animals.—Mfrs.: G. Hell & Co., Troppau, Austria.

ANTHRO-AROBIN is a synonym of *anthrarobin*.

ANTIARTHRIN is a condensation product of equal parts of saligenin tannate and salicin. It occurs as a brown powder, soluble in alcohol and alkalies, and is employed chiefly as a remedy in gout. Dose, 6 to 10 grains a day, in powders or pills. Dispensing it with other chemicals has been cautioned against, on account of its slight content of hydrochloric acid.—Mfrs.: L. Sell & Co., Munich, Germany; agts.: Antiarthrin Co., New York.

ANTIBACILLARE is a mixture of creosote, codeine, sodium arsenate, tolu balsam and glycerin extolled by Dr. Garofalo as a remedy in phthisis.

ANTIBACTERIN is stated to be a mixture composed of commercial aluminium sulphate and soot.

ANTIBAKTERIAN is, according to Aufrecht, a mixture of boric acid, solution of ferric chloride, and chloric ether. It is used in infectious diseases.

ANTIBEX is the fanciful name applied by Dr. Wangler to his *extractum serpylli saccharatum*, a preparation recommended as a remedy in whooping-cough.—Apotheker Sidler, Lucerne, Switzerland.

ANTICANCERIN is a serum obtained from sheep treated with erysipelas cultures. It was recommended by Emmerich for use in cancer.

ANTICELTA is the fanciful name applied to tablets marketed by a London firm, consisting, according to J. Kochs, essentially of 0.5 gram of sodium bicarbonate and some digestive ferment (papain?). Dose, 1 to 2 tablets after meals.

ANTICELTIN is mercury and urea in combination. It is employed in iritis and keratitis by subconjunctival injection in solutions of 1 to 2,000. While it is reported that this remedy is non-irritating, the claim is made that it is fully equal to corrosive sublimate in antiseptic power.

ANTICHIRAGRIN is a name applied to tablets which are put forward for the treatment of influenza, rheumatism, migraine, etc. They are said to contain phenetopyrin.

ANTICHLOR PILLS (not antichlorin) contain, according to Kahm, 0.05 gram each of ferrous sulphate, sodium carbonate, quinine sulphate, and extract nux vomica, with 0.002 gram of arsenous acid. They are used in anemia. Dose, 1 or 2 pills two or three times daily.

ANTICHLORIN is reported to consist of glucose, basic bismuth formate, and sodium carbonate. It has been brought forward as a remedy for anemia. As to a risk in the use of formates see *formaldehyde*.—Mfr.: R. Funke, Berlin, Germany.

ANTICHLOROSE is stated to contain fluid hemoglobin, glycerin and sherry wine, with taste corrigents. It is also marketed as "antichlorose with guaiacol" which contains 1½ grains of potassium guaiacolsulphonate (thiocol)

in a tablespoonful.—Mfr.: Dr. Kuntze, Hirsch-Apotheke, Leipsic, Germany.

ANTICHLOROTIN is the name given to pills containing hemoglobin, sulphur and magnesla, and employed in chlorosis and anemia. Dose, 1 or 2 pills after meals.—Mfr.: Löwen-Apotheke, Görlitz.

ANTICHOLERIN is a metabolic product of cholera bacilli, introduced by Klebs as a remedy in cholera; a brownish-yellow, thick fluid of peculiar odor.

ANTICHOREN is a *peptonized mercuric chloriodide* ($\text{HgI}_2 + 2\text{HgCl}_2$), resulting from the action of mercuric iodide and peptone upon mercuric chloride and occurring as a dark-brown, soft mass soluble in water. It is given in syphilis, internally as 1/6 grain pills or subcutaneously as 2 per cent. solution (15 minims per injection).—Mfr.: Dr. A. Horowitz, Berlin N, Germany.

ANTICILLOID is a urethral bougie containing 10 per cent. of protargol in a cacao butter base and intended as a prophylactic of gonorrhea.

ANTI-DIABETICUM OF BAUER is a liquid preparation of condurango, cola, bay, rosemary, star anise, cinchona, jambul seed, jambul bark, linseed, calamus, gentian, sodium chloride, salicylic acid, etc.—Mfr.: Chem. Laboratorium Bauer, Kötschenbroda near Dresden, Germany.

ANTI-DIABETICUM LIQUID is an antidiabetic preparation said to consist of aqueous fluid extract of senecio fuchsii 97.78 per cent., salicylic acid 0.2 per cent., and trypsin 0.02 per cent. Dose, a tablespoonful, in hot water.—Mfr.: W. M. Stock, Düsseldorf, Germany.

ANTI-DIABETIKUM OF LINDNER is better known as *glycosolvol*, which see.

ANTI-DIABETIN is a French specialty for diabetics' use, consisting of mannite and saccharin mixed in three different proportions and designated as antidiabetin No. 70, No. 10, and No. 1 respectively.

ANTIDIPHATHERIN is a name applied to various preparations used in diphtheria. Antidiphtherin *Klebs* is obtained from cultures of diphtheria bacilli in a fluid medium, and is applied with a brush to the affected parts. Antidiphtherin *Wittstein* (made in Prof. Wittstein's Chemical Laboratory at Munich, Germany) is said to consist essentially of the resinous acids of olibanum, with salicylic acid, carbolic acid and menthol; it is a dry powder employed by fumigation. Finally there is a third antidiphtherin, made in Berlin (by Antidiphtheringesellschaft); a powder stated to consist of 91 parts of potassium chlorate and 4 parts of ferric chloride.

ANTIDIPSO is said to be composed of potassium bromide and sugar, and exploited as a drink cure.

ANTIDOL is a mixture of citric acid, caffeine, salicylic acid, and antipyrin, used as an antineuralgic and anti-

pyretic. Dose, 15 grains.—Mfr.: Paul Stern, Berlin, Germany.

ANTIDOLORIN is a trade name for tubes of *ethyl chloride* used as local as well as inhalation anesthetics.—Mfr.: Norwich Pharmacal Co., Norwich, N. Y.

ANTIDYSENTERICUM OF KOEHLER is said to consist of logwood, pomegranate and simaruba barks. Used in dysentery.

ANTIDYSENTERICUM OF SCHWARZ, also known as "Indian pills," is a remedy for dysentery, consisting, according to reports, of pelletierine, myrobolans, extract of pomegranate, extract of rose, and gum. Six to nine pills, according to the number of stools, constitute the daily dose.—Mfr.: H. Trommsdorff, Aix-la-Chapelle, Germany; agts.: Merck & Co., New York.

ANTIDYSPEPTICUM is a preparation used in seasickness, described as a mixture of "a tartaric double-salt with sodium bicarbonate, magnesia, ammonium chloride, and quinine."

ANTIFEBRIN is a trade name for *acetanilid*.

ANTIFERMENT TABLETS consist of bismuth subnitrate, rhubarb, sodium bicarbonate, magnesium carbonate and peppermint oil-sugar. They are employed as a digestive and antizymotic.—Mfrs.: Dr. H. Müller & Co., Berlin C, Germany.

ANTIFORMIN is a "bacterio-solvent disinfectant" introduced by Prof. Klebs and used in eczema and infantile and senile pruritus.—Agts.: American Antiformin Co., New York.

ANTIFUNGIN is a fanciful name for *magnesium borate*.

ANTIGERMIN is a disinfectant said to be a compound of copper with a weak organic acid; an odorless, greenish-yellow, semi-solid mass, soluble in about 200 parts of hot water. According to Dr. Weisenberg, it strongly hinders decomposition and exhibits marked bactericidal power.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

ANTI GLUCOSINE is said to contain "the active principle formed by the action of the cells of the duodenal mucous membrane which stimulates the pancreas." It is prescribed in diabetes. As it does not maintain its efficacy more than three days it is only made to order.—Mfrs.: Evans Sons, Lescher & Webb, Liverpool, Scotland.

ANTIHEMICRANIN is stated to be a mixture of 1 part each of caffeine and antipyrin, with two parts of sugar. It is given in doses of 10 to 20 grains, chiefly in migraine.—Mfr.: Apotheker Demelinne, Maastricht, Germany.

ANTIHERPIN is a herpes remedy consisting, according to the manufacturer, of liquid tar 10 parts, oil of rape seed

10 parts and Peru balsam 1 part.—Mfr.: J. Rössler, Frechen near Cologne, Germany.

ANTIKAMNIA was reported originally to consist of acetanilid, sodium bicarbonate, and a small quantity of caffeine. With the enactment of the food and drugs act of June 30th, 1906, however, the composition was apparently changed; and, according to analysis made in 1908 at the chemical laboratory of the American Medical Association, "the article now consists of acetphenetidin 72.05 per cent. and caffeine 13.95 per cent. The content of citric acid and sodium bicarbonate (by difference) was found to be 14 per cent." Antipyretic and analgesic. Dose, 5 to 15 grains. It is marketed also as tablets, plain and in various combinations.—Mfrs.: Antikamnia Chem. Co., St. Louis, Mo.

ANTIKOL was brought forward some years ago as an antipyretic and analgesic, but has latterly not been mentioned in the medical or pharmaceutical press. It was described as a mixture of acetanilid 30 parts, sodium bicarbonate 70 parts and tartaric acid 3 parts. Dose, 5 to 15 grains.

ANTIKOLA, is a preparation exploited for the treatment of dipsomania, contains according to Aufrecht about 30 per cent. of sulphur, about 50 per cent. of sodium bicarbonate and 20 per cent. of an indifferent vegetable powder.

ANTIKOLLEMIN is described as a preparation that neutralizes excessive uric acid and other acids circulating in the blood and thus preventing many diseases. According to Zernik, it consists of sodium benzoate, sodium hippurate, calcium fluoride, sodium carbonate and phosphates of potassium, sodium, ammonium, calcium and magnesium.—Mfrs.: Dr. H. Müller & Co., Berlin C., Germany.

ANTILEPROL is purified chaulmoogra oil intended for use, as the name indicates, for the treatment of leprosy. Marketed in 0.5-gram and 1-gram capsules.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York. (It should be noted that the *crude* oil is being used with apparently good results in Manila.—Ed.)

ANTILUPIA "represents the active principles of the strobiles of *humulus lupulus*" [probably lupulin], acetanilide 54 per cent., caffeine 15 per cent., combined with sodium bicarbonate, rochelle salt and sodium bromide." It is exploited as an antipyretic and analgesic, and marketed also as 5-grain tablets and in combinations as tablets.—Mfr.: Norwich Pharmacal Co., Norwich, N. Y.

ANTIMARIN is a sea-sickness remedy, marketed in the form of tablets consisting essentially of 3 grains of anesthesin, and hence analogous to *antivom* pills.—Mfr.: Chem. Institute, Berlin, SW, Germany.

ANTIMELLIN is what R. Börsch of Berlin calls a substance he has isolated from jambul fruit. It occurs as a

light yellow powder of sweetish-bitter taste, and enters into a very complex antidiabetic mixture the discoverer puts out under the same name.

ANTIMONY-ANILIN TARTRATE (*emetique d'aniline*) occurs as white crystals containing 22 per cent. of antimony and soluble in about 7 parts of water. It is brought forward by Laveran for the treatment of sleeping sickness instead of the more poisonous tartar emetic.—Agts.: E. Fougere & Co., New York.

ANTIMORPHIN is a preparation introduced by Dr. A. Fromme of Stellingen, Hamburg, as a remedy for chronic morphinism. According to the statements made in a circular issued by the manufacturers, it consists of a mixture of several bitter tinctures, quinine, and a number of wines. Prof. Fischer and E. Merck claim to have found in it from 1 to 2 per cent. of morphine, or at least of a base closely analogous to morphine.—Mfr.: Noris, Zahn & Co., Berlin. Another "antimorphin" was once on the market which, according to Dr. Heffelmann was a solution of sodium phosphate.

ANTINERVIN (*salbromalid, bromsalifebrin*) is a composite sedative and analgesic introduced by Radlauer, and composed of 25 parts each of salicylic acid and ammonium bromide, and acetanilid 50 parts. Dose, 5 to 10 grains.—Mfr.: Apotheke Radlauer, Berlin, Germany; agts.: Nelson, Baker & Co., Detroit, Mich.

ANTINOSIN (*nosophen-sodium*) is the sodium salt of nosophen (tetraiodophenolphthalein), occurring as a blue, amorphous powder of a faint iodine odor; soluble in water. It is used as a surgical antiseptic, also as a disinfectant in 0.1 to 0.5 per cent. solution in nose and throat troubles, cystitis, etc. On exposure to the air, it is very prone to become decomposed into nosophen and sodium carbonate and become insoluble; hence it should be kept securely stoppered.—Mfr.: Chem. Fabrik Rhenania, Aix-la-Chapelle, Germany; agts.: Merck & Co., New York.

ANTIPARASITIN is a 1 per cent. solution of dinitro-cresol-potassium (antinonnin).

ANTIPERIOSTIN, originally called *ossoline*, is a 30 per cent. solution of cantharidinated mercury iodide, employed in veterinary medicine by inunction as a discutient.—Mfr.: Dr. A. Klein, Berlin W.

ANTIPHLOGIN is a trade name for *antipyrine*.

ANTIPHLOGISTINE is a poultice originally said to consist of powdered kaolin, glycerin, boric acid, salicylic acid, ferric oxide, iodine, and the oils of peppermint, wintergreen and eucalyptus. According to later reports it consists of aluminium silicate, glycerin, small amounts of boric acid and salicylic acid, and traces of iodine and essential oils.—Mfrs.: Denver Chem. Co., New York.

ANTIPHTHISISIN (KLEBS) is better known as *tuberculoicin*, which see.

ANTIPON, an English preparation advertised as an antifat remedy, is said to contain citric acid, benzoic acid, saccharin, oil of wintergreen and cochineal. *Antipon sweetening* tablets are said to contain an artificial sweetening product and are offered as a substitute for sugar in obesity.

ANTIPUTROL is a brownish, viscid liquid of carbolic odor and soluble in water in any proportion. It is said to contain 65 to 70 per cent. of phenol and its homologues, and is used as an antiseptic.—Mfrs.: G. Hell & Co., Tropau, Austria.

ANTIPYONIN is a fanciful name given to finely powdered "neutral tetraborate of sodium" obtained by melting together equal parts of boric acid and borax. It is employed by insufflation as an antiseptic in otorrhea, corneal and conjunctival inflammations, etc. (See also sodium tetraborate, neutral.)

ANTIPYRETICUM is a trade name for *antipyrin*.

ANTIPYRETICUM COMPOSITUM is a pulverulent mixture corresponding to *migrainin*, but made by J. D. Riedel Co., Berlin and New York.

ANTIPYRIN ACETYLSALICYLATE is the chemical designation of *acetopyrin*.

ANTIPYRIN AMYGDALATE (*mandelate*) is marketed as *tussol*, which see.

ANTIPYRIN CAFFEINO-CITRATE.—See *migrainin*.

ANTIPYRIN CARBOLATE was marketed as *phenopyrin* some years ago, but has apparently been withdrawn from the market.

ANTIPYRIN-COLLODION is a 20 per cent. solution of antipyrin in collodion, recommended by Dr. Terson as a styptic for use on small wounds, either alone or with the addition of other medicaments.

ANTIPYRIN IODIDE is known to the trade as *iodopyrin*.

ANTIPYRIN METHYLETHYLGLYCOLATE is referred to under its trade name *astrolin*.

ANTIPYRIN SALICYLACETATE.—See *pyrosal*.

ANTIPYRIN SALICYLATE is better known by the name of *salipyrin*, which see.

ANTIPYRIN-SALOL is a brownish fluid obtained by melting together equal parts of antipyrin and salol. It is employed as a hemostatic, chiefly in uterine hemorrhage, applied on tampons.

ANTIPYRIN TANNATE is marketed as *tannipyrin*.

ANTIRHEUMATICUM is a combination of sodium salicylate and methylene blue, occurring as dark-blue crystals of faintly bitter taste. It is prescribed in doses of 1 to 1½ grains several times daily.

ANTIRHEUMATIN and ANTIRHEUMIN are synonyms of *fluorrheumin*; which see.

ANTIRHEUMOL is a 20 per cent. solution of the glycerin ester of salicylic acid ("glycosal") in glycerin and alcohol and employed as a topical antirheumatic and antineuralgic.—Mfr.: C. Sorge, Frankfort-on-M., Germany.

ANTIRHEUMOL CONCENTRATED is a 50 per cent. solution of glycosal.

ANTIRHINOL is described as a mixture of tannic acid, salol, and oil of sandalwood.

ANTIRIN is a German coryza remedy reported to contain cocaine and boric acid.

ANTISANGUIN, introduced by Dr. Schaefer, of Barmen, as a hemostatic and surgical antiseptic, is, according to Dr. J. Kochs, essentially a solution of about 30 grams of aluminium sulphate and 0.25 gram of salicylic acid in 69.75 grams of water.—Mfr.: Chem. Laboratory "Barmen," Barmen, Germany.

ANTISCABIN is a saponaceous, brown liquid containing as its active ingredients balsam of peru, soft soap, acid boric, betanaphthol, glycerin and alcohol. It is applied in scabies once or twice daily.—Mfrs.: Stephen Ketels, Bremen, Germany.

ANTISCLEROSIN is a remedy marketed in tablet form and corresponding to Trunecek's and Hoppe-Seyler's serum. Two tablets (the single dose) contain sodium chloride 0.77 gram; sodium sulphate 0.08 gram; calcium glycerophosphate, magnesium phosphate, and sodium carbonate, of each 0.03 gram; sodium phosphate 0.025 gram. It is employed in calcification of blood-vessels and in certain nervous diseases. Dose, 2 tablets three times daily.—Agts.: Schering & Glatz, New York.

ANTISEPSIN is the name applied to two entirely different products. The commoner article, also known in some quarters as *asepsin*, is monobromacetanilid or bromanilid, $C_6H_4BrNH(C_2H_5O)$, and occurs as white crystals that are soluble in alcohol or ether but sparingly soluble in water. It is used externally as a surgical antiseptic in 1:10 ointment and internally as an antipyretic and anodyne, in doses of $\frac{1}{2}$ to $1\frac{1}{2}$ grains. (Made by E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.) Antiseptin, *Viquerat* is a lymph obtained by injecting solution of iodine trichloride into abscesses and gathering the exuding serum.

ANTISEPTIC CREDE is a trade name for *silver citrate* as sold in the American market by Schering & Glatz, New York. For description see silver citrate.

ANTISEPTIN Radlauer (*zinc boro-thymol-iodide*) is a mixture of zinc sulphate 85 parts, thymol $2\frac{1}{2}$ parts, zinc iodide $2\frac{1}{2}$ parts, and boric acid 10 parts. It is used as a vulnerary. Antiseptin *Schwarzlose*, a veterinary prophyl-

lactic and remedy, is said to be a solution of 40 parts of zinc sulphate and 4 parts of alum in 100 parts of water.

ANTISEPTOFORM is a very recent formaldehyde compound used as an atmospheric disinfectant and deodorizer.

ANTISEPTOL is a trade name of *cinchonine iodo-sulphate*. Very little heard of during the last few years. (Marketed by G. Harvey & Co., Saratoga Springs, N. Y.).

ANTISPASMIN is the fanciful name given to *narceine-sodium and sodium salicylate*, $C_{25}H_{28}NO_7Na + 3C_6H_4.OH.COONa$; a white, hygroscopic, unstable powder containing 50 per cent. of narceine, soluble in water when freshly made but becoming insoluble and dark-colored with age and exposure. It is employed as an antispasmodic, particularly in whooping-cough of children, in doses of $\frac{1}{8}$ to $\frac{3}{4}$ grain three or four times a day, usually given in sweetened solution. Antispasmin must be kept well protected against light and air.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ANTISPIROCHETIC SERUM.—See under serums.

ANTISPUTOL is a perfumed mixture of peat, solution of copper sulphate and formaldehyde, which is intended especially as a disinfectant for spittoons, etc.

ANTISTAPHYLOCOCCI INJECTION is a sterilized solution of the active constituents of yeast. It is put forward for the treatment of infections produced by staphylococci.

ANTISTAPHYLOCOCCUS SERUM and ANTISTREPTOCOCCUS SERUM.—See under serums.

ANTISTREPTOCOCCIN is Marmorek's *antistreptococcus serum*; which see.

ANTISUDORIN, a specialty for use in excessive sweating of the feet, it is said to be a mixture of salicylic, boric, and citric acids, with glycerin, diluted alcohol and flavoring ethers.

ANTITENIN is a tapeworm remedy consisting, according to the makers' statements, of extract of male fern, koussou, and podophyllin.—Mfr.: Chem. Fabrik "Erfurt," Erfurt, Germany.

ANTITETANIC DUSTING-POWDER is a mixture of equal parts of dry antitetanic serum and chloretone, used on wounds causative of tetanus.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

ANTITETANIC GLOBULINS is a name given to a dried preparation of the globulins of antitetanic serum and afford a convenient remedy for immediate use in tetanus.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

ANTITETANUS SERUM.—See under serums.

ANTITHERMOLINE is analogous to *cataplasma kaolin* U. S. P.—Mfrs.: G. W. Carrick Co., New York.

ANTITHYROIDIN is a thyroid serum introduced by Prof. Moebius. It is obtained from the blood of sheep

from which the thyroid gland has been removed six weeks previously, and contains $\frac{1}{2}$ per cent. of carbolic acid as a preservative. It occurs as an amber-colored liquid with a faint odor and taste of phenol, and is marketed in 10 c.c. vials and as 0.5 gram tablets. It is used in Basedow's disease (exophthalmic goiter), usually per os in doses of 8 minims gradually increased to 70 minims thrice daily; sometimes it is given hypodermically, 15 to 30 minims per dose daily.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ANTITOXIN, DIPHTHERIA, is regarded by many physicians as the best constitutional means for the treatment of true diphtheria. It is obtained from the blood of horses that have been immunized against the disease by successive inoculations with the specific poison of diphtheria. It is prepared in various concentrations, and put up in variously devised and dated tubes, bulbs, etc., containing a specified number of "immunity units," and usually contains carbolic acid or some other antiseptic as a preservative. It is used almost exclusively subcutaneously; some have given it intravenously and others per os, with reported good results. The ordinary dose injected is 2,000 to 3,000 immunity units, but as much as 20,000 units have been given as the initial dose in exceedingly severe cases, and 60,000 units have been employed successfully in treating the same case. While employed generally in diphtheria, this antitoxin has also latterly also been recommended for use in severe scarlet fever cases and in the broncho-pneumonia and other secondary pneumonias complicating the various infectious diseases of children. Diphtheria antitoxin should be kept cool and be disturbed as little as possible; when it has reached the age-limit indicated on the labels, it should be exchanged for a fresh lot.

ANTITOXIN, HAY FEVER.—See *pollantin*.

ANTITOXIN, TETANUS, as introduced and prepared by Tizzoni and Cattani, is a dry powder put up in vials of 5 grams, which represents 5,000,000 immunity units and constitutes a full dose. It is employed subcutaneously or intravenously. The contents of a vial are dissolved in ten parts of sterilized water, and of this half is injected at once, and the remainder in four portions on the following days.—Mfr.: E. Merck, Darmstadt, Germany.

ANTITUSSIN, as known on this market, is a 5 per cent. ointment of difluordiphenyl ($\text{F}_2\text{C}_6\text{H}_4\text{C}_6\text{H}_5\text{F}$), which is prescribed chiefly in whooping cough but to a small extent also in tonsillitis and in inflammatory pharyngeal affections. The dose per inunction is 5 grams.—Mfrs.: Valentiner & Schwarz, Leipsic-Plagwitz, Germany; agts.: C. Bischoff & Co., New York.

ANTITYPHUS (ANTITYPHOID) EXTRACT of Dr. V. Jez is a preparation of the spleen, marrow, and brain of

rabbits immunized against typhoid fever; a reddish, alkaline liquid given in doses of tablespoonful every 1 to 3 hours until febrile movement is entirely wanting, then thrice daily for several days more.

ANTIVENIN is a snake-bite antitoxin prepared according to Dr. Calmette; it will be described under serums.—Mfr.: E. Merck, Darmstadt, Germany.

ANTIVERMICIN Suppositories, put forward as a remedy for rectal worms, are said to contain as their active ingredient an emulsion of naphthalene.—Mfr.: Dr. K. Aschoff, Bad Kreuznach, Germany.

ANTIVOM is the name applied to 3 grain anesthesin tablets, that are prescribed in sea-sickness and nausea. Dose, 1 or 2 pills before meals.—Dr. E. Ritsert, Frankfurt-on-M.; agts.: Schering & Glatz, New York.

ANTORIN is a mixture containing boric acid, tartaric acid, oil of wintergreen, fruit essence and spirit of rose. It is used to arrest excessive perspiration.—Mfr.: H. Noffke, Berlin, SW.

ANTYASE is a bacterial vaccine given hypodermically as an immunizing agent against typhoid fever. Dose, 1/32 grain.

ANUSOL HEMORRHOIDAL SUPPOSITORIES contain, according to the manufacturers, in each dozen, anusol 7.5 grams, zinc oxide 6 grams, balsam peru 1.5 grams, cacao butter 19 grams, cerate 2.5 grams. Anusol is defined as "bismuth iodoresorcinsulphonate of the formula $[C_6H_4-ISO_2O(OH)_2]_3Bi$." Accordingly the suppositories should contain 6.77 per cent. of iodine, 1.71 per cent. of sulphur and 3.71 per cent. of bismuth; but examinations made at the laboratory of the American Medical Association, at various times, were reported to show discrepancies in the content of these elements, each being in every instance considerably smaller than what it should be theoretically. The zinc oxide content was found to be as stated by the makers. Agts.: Schering & Glatz, New York.

ANYTIN is a 33 $\frac{1}{3}$ per cent. aqueous solution of ichthyol-sulphonic acid, which is used to some extent in 1 to 2 per cent. solutions as a surgical disinfectant but chiefly as a means of rendering water-insoluble medicaments soluble in water. A number of such solutions are marketed under the generic name "*anytoles*," the principal ones being *eucasol* and *metasol*; the former is a 25 per cent. solution of eucalyptol in anytin, and metasol is a 40 per cent. solution of meta-cresol. Besides these two, there are made anytoles of cresol (50 per cent. cresols), creosote (40 per cent.), guaiacol (40 per cent.), benzol (20 per cent.), peppermint oil (25 per cent.), wintergreen oil (20 per cent.), turpentine oil (15 per cent.), camphor (15 per cent.), and iodine (10 per cent.).—Mfrs.: Ichthyol Co., Hamburg, Germany; agts.: Merck & Co., New York.

APALLAGIN is the mercury salt of nosophen (tetraiodophenolphthalein); a yellow powder, soluble in ether. It is intended as a surgical antiseptic, particularly on venereal lesions; but little or nothing has been heard of it in medical literature. It must be kept protected against light.—Mfrs.: Chem. Fabrik Rhenania, Aix-la-Chapelle, Germany; agts.: Merck & Co., New York.

APERGOLS are capsules containing apiol, ergotin, savine oil, aloin, and aromatics. They are prescribed in amenorrhea and dysmenorrhea, 1 to 2 capsules thrice daily.—Mfrs.: H. K. Wampole & Co., Philadelphia, Pa.

APERITOL is the name applied by Drs. Hammer and Vieth to *valeryl-acetyl-phenolphthalein*, which is put forward as an aperient free from untoward by-effect and not liable to produce tolerance. It is marketed in the form of bonbons, each containing 0.2 gram of the drug.—Mfrs. J. D. Riedel Co., Berlin and New York.

APHROTIN is, according to Aufrecht, aromatized oat-flour containing small quantities of iron, sodium bicarbonate, and calcium phosphate. It is intended as a tonic.

APHTHENOL is an alleged prophylactic against foot-and-mouth disease of cattle.

APHTHISIN is a combination of 9 parts of potassium guaiacolsulphonate (better known as thiocol) and 1 part of petrosulfol (Austrian ichthyol). It is marketed as a syrup (6 per cent.), and as 4-grain capsules; the dose of the former is a teaspoonful to a tablespoonful; of the capsules, 1 to 4, three or four times a day.—Mfrs.: G. Hell & Co., Troppau, Austria.

APICIN, the active constituent of which is calcium phospho-guaiacolate, is offered as a remedy for chronic pectoral affections. It is marketed as effervescent pastilles.

APIETZO is a food stated to contain approximately 0.1 per cent. of metallic iron and 0.2 per cent. of phosphorus organically combined.

APINOL is said to be obtained from the destructive distillation of the wood of *Pinus palustris* and *Pinus australis*. It is a clear, amber-colored liquid with an odor resembling that of the pine, having a specific gravity of about 0.946, and neutral in reaction. It is offered as an antiseptic, local anesthetic and expectorant. Dose, 5 to 15 minims, on sugar.—Mfr.: Apinol Chem. Co., Wilmington, N. C.

APIOL CRYSTALLIZED (*parsley camphor*), $C_{15}H_{14}O_4$, is obtained from parsley seed. It forms long, colorless needles having a faint odor of parsley and melting at 86° F. It is insoluble in water, but readily soluble in alcohol or ether. It is used as an emmenagogue and antiperiodic. Dose, 2 to 5 grains in capsules; as an antiperiodic, 5 to 15 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

APIOL, GREEN, is an *oleoresin of parsley seed*, occurring as a greenish, oily liquid, insoluble in water but soluble in alcohol, ether or chloroform; specific gravity about 1.05. It is used as an emmenagogue. Dose, 5 to 15 minims, in capsules.—Mfr.: E. Merck, Darmstadt; agts.: Merck & Co., New York.

APIOLINE is described by Chapoteaut, its introducer, as the active principle of parsley and quite different from apiol. It is obtained from ethereal oil of parsley seed by distillation and saponification, and occurs as a thick, reddish liquid of the specific gravity 1.113 and readily soluble in alcohol. It is prescribed in amenorrhea and dysmenorrhea. Dose, daily 2 or 3 of the 3-grain capsules in which form only the preparation is marketed.—Agts.: E. Fougere & Co., New York.

APOCODEINE HYDROCHLORIDE, $C_{18}H_{19}NO_2 \cdot HCl$, is the salt of a derivative of codeine; a yellowish-gray to greenish-gray, hygroscopic powder, freely soluble in water. In action it is in the main analogous to codeine, and has hence been used as an expectorant and sedative, chiefly in chronic bronchitis; but latterly it has come into prominence as a subcutaneous laxative, 30 to 40 minims of a 1 per cent. solution being the usual dose per injection for this purpose. Dose, per os, $\frac{1}{8}$ to 1 grain.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

APOLYSIN is a substance closely related to phenacetin, a *citro-paraphenetidin*, or *monocitryl-paraphenetidin*. It occurs as a white powder of faint odor and acidulous taste; moderately soluble in water, more freely so in alcohol or glycerin. It behaves as an acid (monophenetidinic), and is employed therapeutically as an antipyretic and analgesic claimed to be comparatively non-toxic and non-cumulative. Dose, 10 to 30 grains.—Mfrs.: Von Heyden Chem. Works, Radebeul near Dresden, Germany; agts.: Schering & Glatz, New York.

APOMORPHINE BROMOMETHYLATE OR METHYL-BROMIDE is described under its trade name *euporphin*.

APOMORPHINE HYDROCHLORIDE, as is known, was heretofore used only as an emetic and in smaller doses as an expectorant. However, Dr. C. J. Douglass drew attention to its remarkable sedative and hypnotic powers, and since then it has been largely employed subcutaneously as an antispasmodic and nerve sedative in hiccough, hysterolepsy, acute alcoholism, angina pectoris and puerperal convulsions; small doses, short of producing nausea, are given (1-30 to 1-20 grain). The solution for injection should always be prepared fresh as wanted, with freshly boiled distilled water.—(Nonproprietary.)

APYROL is an antipyretic and antineuralgic said to consist of a mixture of about 52 parts of antipyrin and 48 parts of quinine sulphate. Dose, 10 to 20 grains.

AQUA FERRO-CALCEA (Terlik) is a preparation consisting of iron pyrophosphate, calcium phosphate, glycerin and an aromatic tincture, and employed in anemia, rickets, whooping cough, etc. Dose, a teaspoonful to a tablespoonful.—Mfr.: Apotheker Swoboda, Vienna IV., Austria.

AQUINOL is a disinfectant reported to consist of potash soap, glycerin, thymol and formaldehyde. See caution under *formaldehyde*.

ARABELLA WATER is a Hungarian bitter water, consisting essentially of magnesium sulphate (22 grams per liter), sodium sulphate (15.4 grams), calcium sulphate (1.5 grams), magnesium chloride (0.8 gram), and magnesium carbonate (1.26 grams).

ARBUTIN, $C_{12}H_{16}O_7 + \frac{1}{2}H_2O$, is a glucoside or bitter principle residing in uva ursi; white, odorless crystals, quite freely soluble in water or alcohol, but insoluble in ether. It is used in place of uva ursi preparations as a diuretic and cystic demulcent. Dose, 3 to 10 grains three or four times daily; maximum dose, 15 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ARECOLINE-ESERINE is a mixture of equal parts of arecoline hydrobromide and eserine sulphate, intended for use as a myotic or in veterinary practice as a cathartic similar to its components. Dose (horses), $\frac{3}{4}$ to $1\frac{1}{2}$ grains hypodermically.

ARECOLINE HYDROBROMIDE, $C_8H_{13}NO_2.HBr$, is a salt of the alkaloid of areca nut, occurring as white crystals easily soluble in water and alcohol. It is used chiefly in veterinary medicine, as an active cathartic similar to eserine in action; 1 to $1\frac{1}{2}$ grains is injected subcutaneously in horses in cases of colic. In human medicine it serves as a myotic, a few drops of a 1 per cent. solution being instilled at a time, and as an anthelmintic (1/15 to 1/10 grain.)—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York. (Nonproprietary.)

ARGENOL is an "albuminoid of silver" occurring as a brown, neutral powder containing 10 per cent. of silver and readily soluble in water or glycerin. It is used as an astringent bactericide, like silver nitrate, but is claimed to be less irritating and more penetrating.—Mfrs. John Wyeth & Bro., Philadelphia, Pa.

ARGENTAMINE is one of the first attempts at the modern organic compounds of silver; a 10 per cent. solution of silver nitrate in 10 per cent. ethylenediamine solution. It occurs as a colorless, alkaline liquid, which does not give precipitates with sodium chloride or albuminous fluids, and is freely miscible with water. Its chief use is as an application in gonorrhea and in purulent or follicular conjunctivitis; but it has been given internally, a teaspoonful to a tablespoonful of a $\frac{1}{2}$ to 1 per cent. solution containing a little glycerin every two or three hours, in phthisical

diarrhea and obstinate entero-colitis. It is applied in gonorrhea in $\frac{1}{4}$ to 4 per cent. solutions; in eye disease, in 5 per cent. solution. It should be preserved in dark-glass bottles; discoloration is said not to affect its activity, and usually to be removable by filtration through paper.—Mfr.: E. Schering, Berlin; agts.: Schering & Glatz, New York.

ARGENTOL, or *silver quinaseptolate*, is a compound of silver with oxyquinolinedisulphonic acid, of the formula $C_6H_4N.OH.SO_3Ag$; a fine insoluble powder used externally in 1 to 2 per cent. ointments or dusting-powders in syphilitic ulcers, etc., in 1:1,000 to 3,000 mucilage suspensions in gonorrhea, etc. Internally it is prescribed as an intestinal disinfectant. Dose, up to 15 grains per day. It must be kept well protected from the light.—Mfrs.: Franz Fritzsche & Co., Hamburg, Germany; agts.: Parmele Pharmacal Co., New York.

ARGENTOSE is a synthetic compound of silver and a nucleo-proteid, containing 30 per cent. of silver. It occurs as black scales, freely soluble in water or glycerin. It is used chiefly in gonorrhea (2 to 20 per cent. solutions) and purulent eye disease (up to 50 per cent. solutions).—Mfrs.: H. K. Wampole & Co., Philadelphia, Pa.

ARGONIN (*silver-casein*) results from the interaction of casein-sodium and silver nitrate. It is a nearly white powder containing about 4.2 per cent. of silver and readily soluble in water, sodium chloride solution and alkaline solutions. It is employed principally in gonorrhea, in 2 to 5 per cent. solutions, which should always be prepared fresh and dispensed in dark-amber bottles.—Mfrs.: Meister, Lucius & Brüning, Hoechst-on-M.; agts.: V. Koechl & Co., New York.

ARGYDIDE (*milk of silver iodide*) is a new preparation of silver representing a creamy-white suspension of silver iodide, offered as a wound antiseptic and bactericide, claimed to be free from irritating action.—Mfrs.: Argydide Chem. Co., Philadelphia, Pa.

ARGYRINE has nothing to do with silver, but is an alkaloid obtained from horse chestnut, that is used internally in hemorrhoids. Dose, $\frac{1}{6}$ grain.

ARGYROL is an organic compound of silver (*silver-vitellin*) introduced by Dr. A. C. Barnes. It contains from 20 to 25 per cent. of metallic silver. It occurs in black, glistening, hygroscopic scales, freely soluble in water and glycerin, insoluble in alcohol or oils. The claims are made for this article that it is perfectly non-irritating even when used in concentrated solution and that its solutions keep without deteriorating. Its therapeutic uses are the same as those of the older silver salts—in gonorrhea, infectious diseases of the eye, naso-pharyngeal affections, etc. It is applied in 2 to 5 per cent. injections in urethritis, and in 5 to 50 per cent. solutions in some other ailments.

[More recently the name "argyrol" has been given to a different silver compound, of French manufacture, and defined as silver nucleinate; further data being still wanting and the article as yet unknown in the American market.—Ed.]—Mfrs.: A. C. Barnes Co., Philadelphia, Pa.

ARHEOL is an alcohol of the formula $C_{12}H_{22}O$, derived from sandalwood oil of which it constitutes 60 to 90 per cent. It occurs as an oily liquid, and is marketed in 3 grain capsules, which Ravasini has used internally in gonorrhea and its sequels in the dose of 6 to 12 per day. It seems to have precisely the same action as oil of santal, but stated to have less tendency to upset the stomach. It also appears to be identical with santalol.—Mfr.: Pharmacia Astier, Paris, France.

ARHOVIN is described as the addition-product of diphenylamine and thymyl-benzoic acid ester, obtained by esterizing thymyl-benzoic acid with alcohol and combining the ester with diphenylamine. It is a liquid of the specific gravity 1.055, and of aromatic odor and burning taste; insoluble in water; soluble in ether, chloroform, or alcohol. It is used in gonorrhea, internally, several 0.25 gram capsules per day, and by injection in 5 per cent. solution in oil.—Mfrs.: Goedecke & Co., Leipsic and Berlin; agts.: Schering & Glatz, New York.

ARISTOCHIN or *aristoquin*, chemically definable as *diquinine carbonic ester*, or *neutral carbonic ester of quinine*, $C_{44}H_{40}N_4O_8$, occurs as a white practically tasteless powder containing 96 per cent. of quinine alkaloid, soluble in chloroform, alcohol, or acids, yielding bitter solutions; difficultly soluble in ether, and insoluble in water. It is heralded simply as a tasteless form of quinine which but seldom irritates the stomach or produces cinchonism and the other toxic effects of ordinary quinine. Its dosage is the same as that of the usual quinine compounds. It is largely used for children, especially in whooping-cough.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

ARISTOL is a trade-name for *dithymol diiodide* or *diiodo-dithymol* or the official *thymol iodide*.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld, (Germany) and New York.

AROMATIN is an albuminated ferric pyrophosphate in liquid form and an effervescent sodium pyrophosphate in powder form. Dose, a tablespoonful of the fluid after each meal, followed by a powder dissolved in a small wineglassful of water and drunk while effervescing.

ARMADIPHOTHERIN is a glycerin extract prepared from *dichondra brevifolia*. According to Henrotin, it exerts a destructive influence on diphtheria bacilli while being indifferent to healthy tissue. It is proposed for use chiefly to destroy the diphtheria bacilli that still lodge in the buccal cavity some time after convalescence.

ARRHENAL is a French trade name for *disodium methylarsenate* or *sodium methylarsenate*, and will be referred to under the former chemical designation.—Mfrs.: Adrian & Co., Paris; agts.: E. Fougera & Co., New York.

ARRHENAL-LITHIUM is defined as *lithium chlorhydro-methylarsenate*, and recommended as a readily assimilable arsenical compound.

ARSACETIN is a trade name, *sodium acetyl-arsanilate* or *acetyl-atoxyl*. The article occurs as a white, odorless, tasteless powder, soluble in about 10 parts of water and sterilizable in solution without decomposition. It is used as an alternative in obstinate skin diseases, syphilis, trypanosomiasis, anemia, etc. It is claimed to be less toxic than atoxyl and the usual arsenicals, yet untoward by-effects have been observed from its use. Dose, $\frac{3}{4}$ to $1\frac{1}{2}$ grains three or four times a day; hypodermically, $1\frac{1}{2}$ to $7\frac{1}{2}$ grains twice a week.—Mfrs.: Meister, Lucius & Bruening, Hoechst-on-M.; agts.: V. Koechl & Co., New York.

ARSAMIN is another trade name for *sodium arsanilate*, an article better known on the American market as *atoxyl*, which see for description.

ARSAN (*arsen-glidine*) occurs as a grayish-yellow powder insoluble in water but soluble in solutions of the alkali hydroxides. It is offered as a supersessor of arsenous acid in chronic skin diseases. It is marketed as tablets, each representing 0.002 gram of arsenic.—Mfr.: Dr. V. Klopfer, Dresden-Leubnitz; agts.: Menley & James, New York.

ARSANIL is a new designation for *atoxyl*.

ARSENAURO is a solution of gold and arsenic bromides, each 10 drops of which contains $\frac{1}{32}$ grain each of arsenic bromide and gold tribromide. It is used as an alternative, nerve tonic and antidiabetic. Dose, 3 to 10 minims. [The N. F. *Solution Bromide of Gold and Arsenic* is an analogous product.—Ed.]—Mfrs.: Parmele Pharmacal Co., New York.

ARSENEMIN is a liquid arsenic-iron-pepsin saccharate containing 0.0076 per cent. of arsenic and offered as a hematinic and alternative. Dose, a tablespoonful after meals.—Mfr.: J. Paul Liebe, Dresden, Germany; agts.: Lehn & Fink, New York.

ARSEN-FERRATIN is an arsenated ferratin containing 0.06 per cent. of arsenous acid; a red powder of peculiar odor. Dose, 5 to 10 grains three times daily.—Mfrs.: C. F. Boehringer & Soehne, Mannheim-on Rh.; agts.: Merck & Co., New York.

ARSENFERRATOSE is an elixir of arsenferratin (arsenated ferratin), containing 0.3 per cent. of metallic iron in organic combination and 0.003 per cent. of arsenic in the form of arsenous acid. It is employed as a hemato-poietic and alternative. Dose, a tablespoonful, three or four times a day; children, a teaspoonful to a dessert-

spoonful.—Mfrs.: C. F. Boehringer & Soehne, Mannheim-on-Rh., Germany; agts.: Merck & Co., New York.

ARSENGLIDINE is marketed under the name of *arsan*; see this title.

ARSEN-HEMATOSE is said to contain iron, phosphorus in the form of glycerophosphates, quinine alkaloid, arsenous acid, "extractive matter" and wine.

ARSEN-HEMOL is hemol containing 1 per cent. of arsenous acid; a brown, insoluble powder, employed as an alterative and hematinic in skin diseases, neuroses, etc. Dose, $1\frac{1}{2}$ to 5 grains, two or three times a day, generally prescribed in pills.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ARSENOBENZOL. See *dioxydiaminoarsenobenzol*.

ARSENOGEN is what E. Salkowski calls a preparation of paranucleinic acid, containing about 16.4 per cent. of iron, 2 per cent. of phosphorus and 14 per cent. of arsenic in loose chemical combination with the paranucleinic acid. It is offered as a general tonic and alterative.—Mfrs.: Knoll & Co., Ludwigshafen-on-Rh., Germany and New York.

ARSENOPHENYLGLYZIN is the sodium salt of a derivative of arsenylic acid. It occurs as a yellow powder, which is readily soluble in water. In hermetically sealed tubes it keeps indefinitely, but on exposure to the atmosphere it gradually changes to reddish-brown. It is proposed as an application in the form of ointment in eczematous pannus and fascicular keratitis, as well as in trachomatous pannus.—Mfr.: "Speyer," Frankfort-on-M., Germany.

ARSEN-TRIFERROL is a dark-red, aromatized solution of arsen-triferrin, which latter is an organic compound of phosphorus, iron and arsenic said to contain about $2\frac{1}{2}$ per cent. of phosphorus, 0.1 per cent. of arsenic and about 22 per cent. of ferric oxide.—Mfrs.: Knoll & Co., Ludwigshafen-on-Rh., Germany, and New York.

ARSITRIOL is a name given by Schlagdenhaufen to *calcium glycerino-arsenate*, used as a readily assimilable nerve tonic and antitubercular.

ARSOTROPIN is the designation applied to tablets containing arsenous iodide and extract of belladonna and exploited as a remedy in neuralgia and epilepsy.—Mfrs.: G. Hell & Co., Troppau, Austria.

ARSYCODILE is a trade name for *sodium cacodylate* marketed abroad in tubes containing 0.05 gram in sterilized solution intended for hypodermic or rectal use, and as 0.025 gram pills. *Fer-* or *ferro-arsycodile* is iron cacodylate in pill form (0.025 gram each).—Mfr.: E. Bloch, Basle, Switzerland; agts.: E. Fougere & Co., New York.

ARSYLIN (*arsen-protylin*) is an arsenic, phosphorus and albumin compound containing 0.1 per cent. of arsenic

acid and 2.6 per cent. of phosphorus. It occurs as a yellowish-white, odorless powder, of faint acidulous taste, and absorbed only on reaching the intestines. It is prescribed as an alterative tonic.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle (Switzerland) and New York.

ARSYNAL is another trade name for *disodium methylarsenate*.

ARTEMESIN, or *oxysantonin*, $C_{15}H_{18}O_8$, is a body existing besides santonin in the seeds of *artemisia maritima*; white crystals soluble in chloroform and hot alcohol, but insoluble in cold water. It is marketed in France, combined with quassin and ferrous oxalate, as "dragées de fer Briss," of which the dose as a bitter tonic and appetizer is 2 pills before each of the two chief meals.—Agts.: E. Fougere & Co., New York.

ARTERENOL HYDROCHLORIDE is *amino-ethanol-pyrocatechin hydrochloride* and occurs as a white, odorless, crystalline powder readily soluble in water and very sparingly soluble in alcohol. It is intended for use in the place of suprarenin, adrenalin and other preparations of the suprarenal capsule. It is marketed in the dry form as well as in 1:1000 solution.—Mfrs.: Meister, Lucius & Brünig, Hoechst-on-M.; agts.: V. Koechl & Co., New York.

ARTERIOSE is a non-alcoholic solution of iron and manganese albuminate, containing 4 per cent. of iron and 1 per cent. of manganese. A *bromarteriose* and an *iodarteriose* are also marketed. These preparations are employed as hematinics and as alteratives and nervines.—Mfr.: "Sicco," Berlin W., Germany.

ARTHRISIN is a trade name applied to *acetylsalicyl-amide*, used as an antirheumatic.

ARTHRITICIN is defined as the "nitrile of the ethyl cresol of amido-acetic acid and diethylenimine" (piperazin), and offered as a gout and rheumatism remedy. Nothing further seems to be known about it.—Mfrs.: Chem. Fabrik Falkenberg near Grünau, Germany.

ARTHROSAN is, according to Dr. M. Fraenkel, a new form of administering formaldehyde and sodium citrate simultaneously. It is marketed as tablets which are chiefly prescribed in gout.—Mfr.: Wilhelm Natterer, Munich, Germany. (See *caution* under formaldehyde.)

ARVENOL is a coryza remedy said to consist of an ethereal solution of menthol, thymol and camphor, used by inhalation through a tube containing some cotton impregnated with a few drops of the liquid.—Mfr.: Karl Suppes, Frankfort-on-M., Germany.

ASAPROL is chemically *calcium betanaphthol-alpha-monsulphonate*, $CaC_{20}H_{14}S_2O_6 + 3H_2O$, and is obtained by heating 5 parts of beta-naphthol with 4 parts of concentrated sulphuric acid until the resulting mass dissolves clearly in

water, saturating the solution with calcium carbonate, and evaporating the filtrate to dryness. In the fresh state it is a faintly reddish, neutral, odorless powder that is readily soluble in water; with age it darkens, and becomes less soluble. It is used as an antiseptic, antipyretic and analgesic in tuberculosis, rheumatism, etc., in doses of 5 to 15 grains several times a day. It also serves as a test for albumin in the presence of albumose and peptone. Combining it with antipyrin, quinine salts, potassium iodide, sodium bicarbonate or sulphates has been specifically advised against.—Mfr.: Fabrik Chem. Produkte, Mühlhausen, Alsace.

ASBRADON is bradon said to contain in each 15 grams 0.0005 gram of arsenous acid. It is employed as a nerveine.—Mfr.: Dr. Lutzsche Apotheke, Göppingen, Germany.

ASEPSIN is the name of two different substances described here under *antiseptin* and *gaultherine* respectively.

ASEPTESIA is an antisepticized fluid magnesia, each fluid ounce of which contains hydrated magnesia 24 grains, thymol 1/32 grain, oil peppermint 5/8 minim, oil gaultheria 1/4 minim, oil cardamon 1/8 minim, and saccharin 1/16 grain. It is used as an antacid dentifrice and mouthwash.—Mfr.: H. K. Mulford Co., Philadelphia, Pa.

ASEPTICON is described as "an internal and external antiseptic, for surgical, gynecological, dental and general practice." Its composition does not seem to have been made known.—Mfrs.: Boericke & Tafel, New York.

ASEPTOBILINE is the name applied to keratin-coated dragees containing 2 grains of purified ox-gall or pig's bile, and exploited as a cholagogue and intestinal digestive.—Mfr.: G. Schmit, Paris, France; agts.: E. Fougere & Co., New York.

ASEPTOL (*sozolic acid*) usually means a 33 1/3 per cent. aqueous solution of ortho-phenolsulphonic acid; a yellowish or brownish fluid, specific gravity 1.155, and soluble in water or alcohol. It is used chiefly as an external antiseptic, in 1 to 10 per cent. solutions, in skin diseases, throat affections, etc., but to some extent also internally, in the same doses as salicylic acid. In chemistry it serves as a test for albumin and for bile in urine. Latterly a preparation has been introduced in Norway under the name of "aseptol," which is said to consist of chinosol, soap, and water, with or without various aromatic substances such as terpeneol.—Mfrs.: Harold Gustavson, Stockholm, Sweden.

ASEPTOLIN is a preparation introduced some years ago by Dr. Cyrus Edson as a remedy for tuberculosis and malaria. It is described as an 0.02 per cent. aqueous solution of pilocarpine carbolate containing 2.75 per cent. of carbolic acid in addition. It is used hypodermically, 1 to 2 drams being injected once a day. The article has been

very little heard of recently.—Mfrs.: Aseptic Co., New York.

ASFERRIN.—See *asferryl*.

ASFERRYL (previously known as "asferrin") is "an iron salt of the complex arsenic tartrate," occurring as a greenish-yellow powder, soluble with difficulty in water and dilute acids but readily soluble in dilute alkalies; it contains 28 per cent. of arsenic and 18 per cent. of iron. It is offered as a relatively non-toxic arsenical and chalybeate tonic, in the form of tablets, each of which contains 0.05 gram ($\frac{1}{4}$ grain) of asferryl and 0.95 gram of a mixture of chocolate and vanillin sugar. Dose, 1 to 2 tablets daily.—Mfr.: Dr. Carl Sorger, Frankfort-on-M., Germany; agts.: C. Bischoff & Co., New York.

ASIPHYL is a trade name for *mercuric amidophenyl-arsenate* or *mercury atoxylate*. See *mercury atoxylate*.

ASPAROL is a fluid extract of asparagus tops, used in diabetes and kidney disease.—Mfr.: J. E. Stroschein, Berlin; agts.: Fischer Chem. Importing Co., New York.

ASPHALIN TEA (*species myrtilli comp.*) consists essentially of the leaves and blossoms of huckleberry, and is used in diabetes.

A-S-PHEN is the new designation applied to what was hitherto known as *thermol* and described herein under this title. It is constructed from certain letters of its chemical name *acetyl-salicylic-phenetidin*.—Mfrs.: Organic Chem. Mfg. Co., Philadelphia, Pa.

AS-PHEN-OL is the name for tablets each containing 2 grains each of *aspirin*, *phenacetine* and *salol*. The article is used as an antirheumatic and analgesic. Dose, 1 or 2 every two or three hours.—Mfrs.: Leighton-Wright Co., Buffalo, N. Y.

ASPIRIN is the trade designation for *acetylsalicylic acid* or *salicylic acid acetic ester* which occurs as white needles that are difficultly soluble in water but readily so in alcohol or ether. It is decomposed in solution and is incompatible with alkalies; hence it should be administered by itself in powder form. It is used as a substitute for sodium salicylate in rheumatism, phthisical fever, diabetes, etc., and is given in the same doses as the latter drug.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

ASPIROCHYL is the trade name adopted for *para-aminophenylmercuric arsenate*, an article intended for use especially in syphilis.

ASPIROLITHINE is "a combination of aspirin with organic acid salts of lithium, prepared in tablet form, each tablet containing 5 grains of aspirin and $2\frac{1}{2}$ grains of acid citrotartrate of lithium." It is acid in reaction and hence incompatible with alkalies and their carbonates. It is used as an analgesic and antirheumatic like

salicylic acid. Dose, 1 to 3 tablets, with a copious draught of water.—Mfr.: McKesson & Robbins, New York.

ASPIROPHEN is a new antirheumatic and analgesic introduced by Dr. Schwarzenberg for use in rheumatism and allied affections in which salicylic acid and a bactericide are indicated at the same time. Chemically it is *amido-para-phenetidin acetylsalicylate*, $C_6H_4.OC_2H_5:NH.CO=CH_2NH.COCH_3$. It is credited with marked antipyretic and analgesic properties, and is said to produce far less perspiration than does aspirin. Dose, 5 to 15 grains.—Mfr.: Chem. Fabrik "Falkenberg," Falkenberg-Grünau, near Berlin.

ASSANOL is the new name applied to *pilocarpinum compositum* tablets described in these pages.

ASQUIRROL is a water-soluble mercurial containing about 56 per cent. of Hg, and specially intended for hypodermic use in syphilis.—Mfrs.: Poulenc Frères, Paris, France; agts.: Parmele Pharm. Co., New York.

ASTEROL is a double salt of mercury paraphenolsulphonate (sulphocarbolate) and ammonium tartrate, of the formula $C_{12}H_{10}O_8S_2Hg.4C_4H_4O_6(NH_4)_2+8H_2O$; a yellowish powder, containing 15 per cent. of mercury, and soluble in hot water, the solution remaining clear on cooling. Ammonia and alkalies do not precipitate the mercury from solutions. It is claimed to possess all the advantages of corrosive sublimate as a disinfectant without its drawbacks. It is used in 2 to 5:1000 solutions; also by intramuscular injection in syphilis, 15 minims of a 4 or 5 per cent. solution. It is marketed also as 0.2 gram tablets.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle (Switzerland) and New York.

ASTHMAKARBON is the name applied to the herb and roots of *punaria ascochingæ*, a *composita*, compressed in powdered form into 5-gram tablets and mounted upon cylindrical pieces of wood charcoal. When an asthma paroxysm sets in, the charcoal is heated on a tin saucer until red hot, whereby the tablet takes fire, the fumes that are given off being inhaled by the patient slowly and at a distance. The plant used is said to contain a glucoside, resin and ethereal oil; an alkaloid has not been discovered in it.

ASTRA is an infants' food with 12.7 per cent. albumin content.—Mfrs.: Gesellschaft für Diet. Präparate, Zurich, Switzerland.

ASTROGEN is said to consist of 5 per cent. of bismuth subnitrate, 12 per cent. of calcium carbonate, 10 per cent. of sodium chloride, 3 per cent. of sodium sulphate, 65 per cent. of sodium bicarbonate, 3 per cent. of pepsin and 2 per cent. of rhubarb. It is put forward as a digestive and stomachic.—Mfr.: W. F. Weiss, Munich, Germany.

W. F. WEISS, MUNICH, GERMANY

ASTROLIN is described as a compound of antipyrin with methylethyloxyacetic acid, that is *antipyrin* or *phenylidimethylpyrazolon methylethylglycolate*. It contains about 61 per cent. of antipyrin and occurs as a white powder of faint odor and pleasant acidulous taste. It is offered as an antipyretic and analgesic. Dose, 8 to 15 grains.—Mfrs.: J. D. Riedel Co., Berlin and New York.

ASUROL is defined as "amido-oxyisobutyric acid-oxy-mercurisalicylate of sodium." It contains about 40 per cent. of metallic mercury and has been introduced as a water-soluble mercurial for subcutaneous and intramuscular injection. It is marketed also in ampuls containing 2.2 Cc. of a 5 per cent. solution, which quantity constitutes a hypodermic dose.—Mfr.: Fabenfabriken of Elberfeld, Elberfeld, Germany, and New York.

ATHENSA is a chalybeate preparation said to be similar to Athenstaedt's tincture of iron, but which differs from the latter in containing but little alcohol.

ATHRIN is an ointment said to consist of menthol and diricin soap. It is exploited as a local remedy for coryza.—Mfr.: Kaiser Friedrich Apotheke, Berlin NW, Germany.

ATOXYL is a brand of *sodium arsanilate* or *sodium aminophenylarsonate*, containing about 26 per cent. of arsenic and corresponding to the formula $C_6H_4(NH_2).(AsO.OH.ONa)+3H_2O$. It occurs as a white, odorless, tasteless crystalline powder readily soluble in water. It is claimed to be less poisonous than the ordinary arsenical compounds. Yet untoward symptoms such as blindness has been observed after six injections of 0.5 gram ($7\frac{1}{2}$ grains) each. Used in skin diseases, cachexias such as accompany carcinoma, etc. It is generally administered subcutaneously, 1 to 3 grains per day; it is said not to impart a garlicky odor to the breath, perspiration, and dejections as the cacodylates do.—Mfrs.: Vereinigte Chem. Werke, Charlottenburg, Germany; agts.: Victor Koechl & Co., New York.

ATOXYL-IRON TABLETS are said to contain atoxyl, ferrous lactate and sugar of milk.

ATOXYL-MERCURY. See *mercury atoxylate*.

ATOXYL-QUININE CAPSULES each contain 0.01 gram of atoxyl, 0.05 gram of quinine hydrochloride, 0.0008 gram of strychnine nitrate and 0.3 gram of Bland's mass. They are employed as an alterative, nerve tonic and hematinic.

ATRABILIN is described as a light-yellow, stable liquid preparation of the suprarenal gland, which is used chiefly in ophthalmology to produce mydriasis and anesthesia and to relieve congestion. It is generally prescribed in 1:5 dilution with distilled water or rose water containing 4 per cent. of boric acid. It is also marketed as snuff.—Mfr.: Max Leschnitzer, Breslau I, Germany.

ATROPINE METHYLBROMIDE, or *methyl-atropine bromide*, $C_{17}H_{23}NO_2Br$, has been introduced by Dr. L. Vaupel as a mydriatic, antihidrotic, and antisialogogue, similar to atropine but more speedy and evanescent in action than the latter. It crystallizes in white leaflets containing 21 per cent. of bromine, and readily soluble in water and diluted alcohol. It is applied in 1 per cent. solution.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ATROPINE METHYLNITRATE is better known by the trade name *eumydrin*. See this title.

ATROSCINE is an optically inactive form of hyoscine, and forms colorless crystals insoluble in water but soluble in alcohol, ether or chloroform. It has been prescribed as a mydriatic in 1 per cent. solution in castor oil, and internally as a sedative like hyoscine.—Mfr.: E. Merck, Darmstadt; agts.: Merck & Co., New York.

ATROSOGEN is a digestive powder said to consist of bismuth subnitrate 5 parts, calcium carbonate 12 parts, magnesium carbonate 3 parts, sodium chloride 10 parts, sodium sulphate 3 parts, sodium bicarbonate 65 parts, pepsin 3 parts, and powdered rhubarb 2 parts.—Mfr.: W. F. Weiss, Munich, Germany.

ATTRITIN is the name applied to a sterilized solution of sodium salicylate (17.5) and caffeine (2.5) in distilled water (80), recommended by Mendel and Behr for use by intravenous or intramuscular injection in cases of rheumatism, sciatica and the like, where the employment of salicylic acid or its salts by the mouth or topically is contraindicated. It is marketed in ampuls containing 2.25 c.c., which constitutes the dose, to be given once every 12 hours to 3 days.—Mfr.: Ver. Chem. Werke, Charlottenburg, Germany; agts.: V. Koechl & Co., New York.

AULICIN consists of pills said to contain iron peptonate, freshly precipitated ferric oxide, anise, blessed thistle, quinine hydrochloride, and juniper extract. It is prescribed for anemia and neurasthenia.—Mfr.: L. Hoffmann's Apotheke, Lorch, Germany.

AURAMINE is a name applied to *pyoktanin yellow*, an anilin dye used as an antiseptic in certain eye diseases. (See *pyoktanin*.)

AURICOL is an antirheumatic preparation which is advertised as "containing in a palatable elixir, iodide of strontium, salicylate of strontium, gelsemium, colchicine and chloride of gold and soda."—Mfr.: H. O. Hurley, Louisville, Ky.

AUTAN, a powder put forth as a disinfectant of dwellings, is said to consist of a mixture of paraformaldehyde and metal peroxides. When water is poured upon it gas is evolved, the evolution becoming greater and greater, foaming sets in, the mass suddenly rises in the container

and boils, vapor of formaldehyde and of water being given off.

AUTOMORS is a disinfectant, consisting of a mixture of a cresol preparation with free sulphuric acid. The brown-black liquid poured into a large amount of water forms a milky liquid with a not disagreeable odor.—Mfrs.: Heyl Bros. & Co., Charlottenburg, Germany.

AUTOPLAST is a collodion-like liquid used as an antiseptic-protective paint in burns and wounds.—Mfr.: E. Rothholz & Co., Berlin O, Germany.

AUXIL is a German specialty intended for use in varicose ulcers, burns, etc., and consisting of three preparations; a bath powder, a dusting-powder for wounds, and a blood-purifying tea.—Mfr.: Apotheker Mayer, Dresden, Germany.

AUXILIN Tablets are said to contain extract of myrrh leaves, extract of phaseolus, extract of tormentilla root, fluidextract of jambul bark, powdered myrrh leaves, tormentilla, saccharin, egg albumin and oil of lemon. They are exploited as an antidiabetic.—Mfrs.: Sieger & Co., Bad Kreuznach, Germany.

AUXILIUM MEDICI is the fanciful name adopted for a medicinal quality of solution hydrogen dioxide, for which the claims are made that it is "pure, neutral and stable."—Mfrs.: Königswarter & Ebell, Linden, near Hanover, Germany.

AVENINE, formerly defined as an alkaloid but latterly more correctly described as a resinoid, is an extract of *avena sativa* claimed to contain the alkaloidal principles present in oats. It occurs as brown, friable masses of aromatic odor, and soluble in alcohol. It is used as a nerve stimulant in doses of 1/120 to 1/60 grain several times daily, given in pills.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

AVENOSE is a mixture of oat flour and soluble acorn-malt extract.—Mfr.: Apotheker G. Nab, Steglitz, Germany.

AZYMOL, according to Aufrecht, is a red-colored, aromatized tincture of *krameria* containing also salicylic acid, saccharin, and menthol. It is used as a mouth and wound antiseptic.

B

BABAIN is a compound of antipyrin and salicylic acid, the exact composition of which is not divulged, but probably analogous to *salipyrin*.

BACILLOL is a soap solution of cresols, similar to the liquor cresoli compositus U. S. P. and lysol, containing about 52 per cent. of cresols; a dark-brown, clear, thick, oily fluid of faint alkaline reaction, specific gravity of 1.100, odor reminding of carbolic acid but less pervasive

and persistent. It is freely miscible with water, yielding almost perfectly transparent solutions. It has been employed as a medicinal disinfectant in 1 to 2 per cent. solutions and particularly extolled in veterinary practice; it has been withdrawn from the market.—Mfr.: Franz Sander, Hamburg, Germany.

BACTERINS (*bacterial vaccines*) consist of suspensions of killed pathogenic bacteria in normal saline solution, standardized by determining the number of bacteria per Cc. of suspension. They are used in accordance with the principles of Sir A. E. Wright, of London, England. Wright's principles of vaccine therapy are founded on the theory of active immunization; his demonstrations show that certain substances in the blood and other fluids of the animal body act upon bacteria and modify them in such a way that they are taken up and digested by the phagocytes. These substances Wright terms "opsonins," a word derived from the Greek, meaning "to prepare for food." These opsonins may be greatly increased in amount by the injection of killed bacteria. Wright terms standardized and sterilized suspensions of bacteria "vaccines." As the term "vaccine" more properly refers to virus derived from bovines, the term "bacterins" has been proposed. By the use of bacterins, or bacterial vaccines, the opsonins and other antibodies in the blood may be increased, and, other things being equal, this increase is characterized clinically by improvement in the patient's condition. When a bacterin is injected into the tissues of a patient suffering from an infection of the corresponding live germ, the formation of the special opsonin having the power of preparing that germ for phagocytosis is stimulated. The blood and lymph thus enriched, circulating through the focus of infection, prepare the invading germ for destruction by the phagocytes. Bacterial therapy is therefore dependent upon the injection of an appropriate bacterin and the flushing of the focus of invasion by the enriched blood and lymph. The latter is favored by local application of hot salt solution, rubefacients, the use of the Bier method, surgical incision, massage, and the internal use of drugs, such as citric acid, sodium nitrate, etc., which decrease the coagulability of the blood. Bacterial vaccines are prepared either from germs cultivated in the laboratory, or directly from germs isolated from the patient. In the first case they are known as stock vaccines; in the latter, as autogenous vaccines. Stock vaccines have been found equal to and sometimes superior to autogenous vaccines in the treatment of infections due to staphylococci, gonococci, and the tubercle bacillus. They are also useful in the treatment of many infections caused by the colon bacillus, streptococcus, and the pneumococcus. Thus we have *acne-bacterin*, *coli-bacterin*, *Friedländer-bacterin*,

Neisser-bacterin, neoformans-bacterin, pneumo-bacterin, etc., etc.—Mfr.: H. K. Mulford Co., Philadelphia, Pa.

BACTOFORM is a new formaldehyde-soap preparation marketed in liquid as well as in gelatinous form, and used in 1 to 2 per cent. solutions as a surgical antiseptic and disinfectant of the hands and instruments.—Mfr.: "Kellon," Vienna, Austria.

BARDELLA is Dr. von Bardeleben's antiseptic dressing material supplied in pieces $4\frac{1}{2}$ yards long and as bandages of various widths.—Supplied by E. Bischoff & Co., New York.

BARIUM CHLORIDE was recommended a few years ago as a reliable purgative, given intravenously, in the colic of horses—6 to 20 grains dissolved in $2\frac{1}{2}$ drams of water. Very recently Dr. Schedel pointed out its usefulness in human medicine as a cardiac tonic similar in its indications to digitalis. He gives $\frac{1}{8}$ to $\frac{3}{4}$ grain twice daily, with a little milk sugar, two hours after the principal meals. The maximum dose is 3 grains.—(Nonproprietary.)

BARMENIT is a name given to *sodium chloroborate*.

BARUTIN is the name applied to the double salt *barium-theobromine* and *sodium salicylate* occurring as a white, faintly alkaline, water-soluble powder containing 25 per cent. of theobromine. According to Dr. E. Bibergeil, it is an efficient diuretic. Dose, 3 to 8 grains, in sweetened solution; acid syrups should be avoided. As the product is very susceptible to the influence of carbon dioxide, which decomposes it, it should be kept well stoppered.—Mfr.: Actengesellschaft für Anilinfabrikation, Berlin O, Germany; agts.: Lehn & Fink, New York.

BASEDOWSAN is a serum obtained from the blood of goats and sheep from which the thyroid gland has been extirpated. It contains 0.5 per cent. of carbolic acid as a preservative, and is used in Basedow's disease (exophthalmic goiter), internally and hypodermically. Dose, 15 to 60 minims after meals; subcutaneously 4 to 15 minims. The preparation is very similar to if not identical with Moebius' antithyroidin.—Mfr.: Simon's Pharmacy, Berlin C, Germany.

BASICIN (*corticin*) is a compound of quinine hydrochloride and caffeine, containing 60 per cent. of quinine and 30 per cent. of caffeine; a white crystalline substance soluble in 1 part of water, and, according to A. Kreidmann, is thrice as powerful as quinine yet free from its by-effects. It is employed per os and subcutaneously in migraine, chronic rheumatism, influenza, etc.; 3 to 8 grains per dose. *Basicin oil* consists of dried basicin 5, chloroform 37.5, alcohol 12.5, and olive oil 45; it is used as a liniment as an adjunct to the internal use of the drug or where the latter is not borne well per os or subcutaneously.—Mfrs.: Schröder & Krämer, Hamburg, Germany.

BASOL is a Swiss liquid disinfectant containing 50 per cent. of cresol and intended as a substitute for lysol. It is

very similar to the official *solution cresol compound*.—Mfrs.: Bohny, Hollinger & Co., Basle, Switzerland.

BATES' SALT.—See *Sal de Bates*

BAVAROL is analogous to the preceding article.

BEBEERINE must not be confounded with *berberine*. The former is an alkaloid from *nectandra* or *pareira brava* of the formula $C_{10}H_{17}NO_3$, and is given in doses of 1/12 to 1/4 grains, according to the indications. *Berberine* is the colored alkaloid of *berberis vulgaris*, *hydrastis* and some other plants, of the formula $C_{20}H_{17}NO_4$, and is administered in doses of 1 to 15 grains.—(Nonproprietary.)

BELLOFORM, according to its introducer, is a saponaceous solution of a condensation product of cresol and formaldehyde. It is put forward as a veterinary antiseptic and disinfectant for external as well as internal use. Dose, about 1 fluid dram. All formaldehyde compounds should be looked on with caution, there being a possibility of injury to or destruction of sight from the use of formaldehyde.—Mfrs.: Teerprodukten-Fabriken, Biebrich-on-Rh., Germany.

BENESOL is a Spanish dental local anesthetic said to be a sterile solution of eucaine, cocaine hydrochloride, carbolic acid, menthol, eucalyptol, and amyl nitrite.

BENETOL (*glycerite of naphthol*) is a liquid antiseptic and germicide, said to have originated at the laboratory of medical chemistry of the University of Minnesota.—Mfrs.: Northern Chem. Association, Minneapolis, Minn.

BENGUE'S BALSAM is said to consist of 5 parts each of menthol and methyl salicylate and 6 parts of wool-fat.—Agts.: Thos. Leeming & Co., New York.

BENZACETIN (*acetamidoethylsalicylic acid*), $C_9H_9(OC_2H_5)(NH.COCH_3)COOH$, occurs as colorless needles sparingly soluble in water, but more readily soluble in alcohol. It is employed as an analgesic and antineuralgic. Dose, 7½ to 15 grains.

BENZAMIDE-ANTIPYRIN. See *plejapyrine*.

BENZAMIDO-SEMICARBAZIDE is the chemical designation for the article marketed as *cryogenin*, which see.

BENZANALGEN is synonymous with *quinalgen*.

BENZANILID (*benzoyl-anilin* or *phenyl-benzamide*), occurs in white to reddish crystals, readily soluble in alcohol but nearly insoluble in water. It is used as a mild antipyretic, especially in the infectious diseases of children, in doses of 1½ to 6 grains; adults receive 10 to 15 grains per dose.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

BENZENE or *benzol* is used to a limited extent as an antispasmodic and anticatarrhal in whooping cough, influenza, etc., in doses of 2 to 10 minims every three hours, taken in emulsion, in capsules, or on sugar. Maximum dose, 45 minims.—(Official.)

BENZO-EUGENOL (*benzoyl-eugenol* or *eugenol benzoate*) results from the action of benzoyl chloride upon eugenol-sodium, and occurs in white, odorless crystals which are soluble in alcohol and ether but insoluble in water. It is prescribed in tuberculosis in place of benzosol, also in neuralgic headache. Dose, $7\frac{1}{2}$ to 15 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

BENZOFORMAL COMPOUND is a liquid antiseptic, each fluid ounce of which contains glycerite boroglycerin 40 grains, sodium borate $12\frac{3}{4}$ grains, sodium benzoate $1\frac{1}{4}$ grains, sodium sulphocarbonate $\frac{3}{4}$ grain, solution formaldehyde $\frac{1}{3}$ minim, camphor $\frac{2}{3}$ grain, eucalyptol $\frac{1}{2}$ minim, menthol $\frac{1}{4}$ grain, and oil gaultheria 9/10 minim.—Mfrs.: H. K. Mulford Co., Philadelphia, Pa.

BENZOIC ACID BENZYL ESTER is *peruscabin*.

BENZOIC ACID SULPHINID is *saccharin*.

BENZOIODHYDRIN results from the interaction of benzoyl iodide and epichlorhydrin. It is a crystalline substance containing $38\frac{1}{2}$ per cent. of iodine, unctuous to the touch and soluble in ether, alcohol or chloroform. It is said not to produce iodism and smaller doses of it to have the same therapeutic effects as potassium iodide. Dose, 2 to 5 grains, usually prescribed in sugar-coated pills.

BENZOMORPHINE is an English trade name for *benzylmorphine hydrochloride* or *peronin*.

BENZONAPHTOL (*naphtol benzoate*), $C_{10}H_7.COO.C_{10}H_7$, is obtained by melting together equal parts of beta-naphtol and benzoyl chloride. It forms a whitish crystalline powder, soluble in alcohol and chloroform, almost insoluble in water; it darkens with age. It is given as an intestinal antiseptic in diarrheal affections. Dose, 5 to 10 grains several times daily, up to 75 grains a day; children receive 10 to 30 grains in the course of a day.—(Nonproprietary.)

BENZOSALIN is the trade name applied to the methyl ester of benzoylsalicylic acid. It occurs in minute white needles, possessing a faint aromatic odor and scarcely any taste, readily soluble in alcohol, and practically insoluble in water; decomposed by alkalis; melting-point 85° C. It is intended as an antirheumatic and intestinal, antiseptic, analogous to salol. Dose, $7\frac{1}{2}$ to 15 grains singly, 45 to 60 grains per day, in tablets, in which form alone the article is marketed.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle (Switzerland) and New York.

BENZOSOL is *guaiacol benzoate* or *benzoyl-guaiacol*, $C_6H_5.OCH_3.COO.C_6H_5$, a compound of guaiacol in which a hydrogen atom of its hydroxyl is replaced by benzoyl. It occurs as a white, crystalline powder of slight odor and taste; readily soluble in hot alcohol, ether or chloroform; insoluble in water; guaiacol content about 54 per cent. It is incompatible with alkalis. It is employed chiefly as an intestinal antiseptic; also in diabetes, cystitis, etc. Dose, 4 to 10 grains after meals.—Mfrs.: Meister, Lucius

& Brüning, Hoechst-on-M.; agts.: V. Koechl & Co., New York.

BENZOTHYMOL is a liquid antiseptic containing thymol, eucalyptol, menthol, baptisia, methyl salicylate, boric acid and benzoic acid; apparently analogous to the U. S. P. *Liquor Antisepticus*.—Mfrs.: Sharpe & Dohme, Baltimore, Md.

BENZOYLACETYL PEROXIDE is the chemical designation for *acetozone*.

BENZOYLALKYLAMINETHANAL HYDROCHLORIDE is a new local anesthetic occurring in the form of long needles readily soluble in water. The free base occurs as a thick, noncrystallizable oil.—Agts.: Schering & Glatz, New York.

BENZOYL-ANILIN is a synonym of *benzanilid*.

BENZOYL-ARBUTIN. See *cellotropin*.

BENZOYL-EUGENOL.—See *benzo-eugenol*.

BENZOYL-GUAIACOL.—See *benzosol*.

BENZOYL-PARA-CRESOL (*para-cresol benzoate*) occurs as colorless crystals melting at about 70 to 71° C., soluble in hot alcohol and ether, and insoluble in water. It is used as an intestinal antiseptic. Dose, 4 to 8 grains.

BENZOYL PEROXIDE (*benzoyl superoxide*), $C_6H_5.CO.O.CO.C_6H_5$, is prepared by treating commercial sodium peroxide (5 parts) with an equimolecular quantity of benzoyl chloride (9 parts) at about 4° C. The resulting precipitate is filtered off and recrystallized from hot alcohol. It occurs as permanent, non-deliquescent, white, odorless prisms melting at about 103° C., slightly soluble in water, more readily soluble in alcohol, and dissolving in 35 to 50 parts of olive oil. According to Dr. Loewenhart, benzoyl peroxide is an indifferent substance when taken internally, but a mild anesthetic and powerful disinfectant when applied externally. It has been used as a wound antiseptic and dermic pure or in 10 per cent. ointment, or as concentrated solution in olive oil.—Mfrs.: Hynson, Westcott & Co., Baltimore, Md.

BENZOYL-PSEUDOTROPEINE is the chemical designation of the article marketed as *tropacocaine*.

BENZOYLSODIUM-THYMOL OXYBENZOATE is known in the trade as *pyran* or *pyrenol*.

BENZOYL-SUCCINYL PEROXIDE is a colorless crystalline substance of aromatic odor and very pungent taste, soluble in chloroform and alcohol; in water it decomposes into benzoic and succinic acids. It is put forward as an antiseptic.

BENZOZONE is the old name for *acetozone*.

BENZYL BENZOATE 25 PER CENT. is a substitute for *peruol*, and BENZYL BENZOATE 100 PER CENT. a substitute for *peruscabin*.—Mfrs.: Hoeckert & Michaelowsky Berlin, SW.

BENZYL-MORPHINE. See *peronin*.

BERBERINE is the colored alkaloid contained in *berberis vulgaris*, *hydrastis* and other plants, of the formula $C_{20}H_{17}NO_4$. It is used only in the form of its salts, as a bitter tonic and antiperiodic. *Berberine phosphate*, $(C_{20}H_{15}NO_4)_3 \cdot (H_3PO_4)_2 \cdot 5H_2O$, occurs as a yellow, crystalline powder rather freely soluble in water; *barberine sulphate* (crystalline), $C_{20}H_{15}NO_4 \cdot HSO_4$, forms yellow needles soluble in water and in alcohol. Dose of the various salts, as a stomachic tonic $\frac{1}{2}$ to 1 grain; as an antiperiodic $7\frac{1}{2}$ to 15 grains.—Mfrs.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

BERTOLIN is said to be a fluid extract of *bertolletia* fortified with other ingredients. It is put forward as a remedy in rheumatism and gout. *Bertolin creme* and *bertolin soap* are offered for external application.—Mfrs.: Bertolin Works, Wiesenthal, near Berlin, Germany.

BERTOLIN is a Berlin remedy for gout, rheumatism and malaria, said to be essentially a fluid extract of the root of *nicotiana bertolinii*, but containing some tannin and other ingredients but no colchicine or salicylic acid.—Mfr.: C. W. Barenthin, Berlin W, Germany.

BETA-EUCAINE.—See *eucaine*.

BETA-LYSOL is a trade name for *liquor cresoli saponatus* of the German Pharmacopœia.—Schülke & Mayr, Hamburg, Germany; agts.: Lehn & Fink, New York.

BETA-NAPHTOL BENZOATE is described under *benzonaphtol*.

BETA-NAPHTOL-BISMUTH is better known as *orphol*.

BETA-NAPHTOL SALICYLATE is *betol*.

BETAINE HYDROCHLORIDE.—See *acidol*.

BETOL, also known as *naphtalol*, *naphtol-salol*, *salinaphtol*, *salicylic acid beta-naphtol ester*, *beta-naphtol salicylate*, $C_6H_4.OH.COOC_{10}H_7$, is obtained by heating beta-naphtol-sodium and sodium salicylate with phosphorus oxychloride, and occurs as a white, glistening powder, soluble in hot alcohol, insoluble in water. It is used in intestinal disorders, gonorrheal cystitis, articular rheumatism, etc. Dose, 4 to 10 grains three or four times daily given in wafers or with milk.—(Nonproprietary.)

BETULINAR is an antiseptic toilet wash consisting, according to Aufrecht, of menthol, salicylic acid, cumarin, borax, glycerin, alcohol and water.

BETULOL is a liniment containing oil of *betula* as its chief ingredient and employed externally in rheumatism and gout.—Mfrs.: E. Fougere & Co., New York.

BETUNEPHROL is a well-keeping infusion of *betula*, exploited as a non-irritating diuretic and solvent of renal calculi.—Mfr.: Kronen-Apotheke, Breslau, Germany.

BICKMOL, recommended for the treatment of lameness of horses, is a mixture of spirit of camphor, ammonia water, spirit of ether and tincture of arnica.

BIERMER'S IRON PILLS are said to contain quinine hydrochloride, reduced iron, and extract of *nux vomica*.

BIGALL is a German trade name for *bismuth subgallate*.

BILEIN is the name given to a mixture of the essential salts of bile, sodium glycocholate and taurocholate, offered as a cholagogue and laxative and marketed as tablets.—Mfr.: Abbott Alkaloidal Co., Chicago, Ill.

BILISAN, advertised as a remedy for the treatment of gall-stones, is said to be a tincture of rhubarb.

BIOCITIN is the name applied to what is described as a "physiologically pure lecithin" in combination with the nutritive substances of eggs and milk. The article is an odorless powder, soluble in water and other beverages as well as in liquid foods, and contains, according to Zernik, about 10 per cent. of lecithin. It is put forward as a general tonic and nutrient.—Mfrs.: Biocitinfabrik, Berlin, SW, Germany.

BIODAL is defined as *mono-iodo-dibismuth-methylene dicresotinate*. It is used as a dusting-powder on wounds. See caution under *formaldehyde*.—Mfrs.: Barnes Chem. Co., Philadelphia, Pa.

BIODILIN is a fine, brownish-red, almost tasteless powder, having a slight odor like that of peach kernels, practically insoluble in water, ether or alcohol, decomposed slowly by dilute alkalis (resulting in the liberation of iodine and chinoline), and containing 53 per cent. of iodine, 30 per cent. of bismuth, and 17 per cent. of chinoline. It is used externally as a substitute for iodoform, and internally as an intestinal disinfectant and astringent. Dose, 2 to 6 grains.—Mfrs.: John Wyeth & Bro., Philadelphia, Pa.

BIOFERRIN is a liquid hemoglobin-albumin preparation which is administered as a blood-builder to children in doses of 1 to 4 fluid drams per day, and to adults in daily quantities of $\frac{1}{2}$ to 1 oz.—Mfrs.: Kalle & Co., Biebrich-on-Rh.; agts.: Lehn & Fink, New York.

BIOGEN (*hopogan*) is said to be magnesium peroxide (MgO_2) and described as an odorless, tasteless, permanent, insoluble white powder, which is used "whenever the system vitality is reduced from any cause, when there is temporary or protracted failure on the part of the organs to perform their functions, and when it is required to increase nutrition," etc. Dose, 5 to 15 grains every three or four hours. Marketed also as 5-grain tablets.—Mfrs.: Kirchhoff & Neirath, Berlin N, Germany; agts.: Medicinal Dioxide Co., New York.

BIOGLOBIN is a German *wine of hemoglobin* offered as a hematinic.—Mfr.: Biogloblin-Gesellschaft, Schöneberg, near Berlin, Germany.

BIOGUAICOL.—See *guaiacol phosphate*.

BIO-MALT is described as a stable, liquid extract of malt containing phosphates, and is put forward as a nutritive and roborant for the sick and convalescent.—Mfrs.: Patermann Bros., Friedenau, near Berlin, Germany.

BIOPLASM is a so-called "tissue food" containing "nuclein, lecithin, diastase, trypsin, fibrinogen, and other organic ferments." It is a light-gray powder of sweet taste and soluble in aqueous fluids. It is usually given in 5 to 15 grain doses several times a day, and allowed to dissolve in the mouth, and the patient is enjoined to drink water freely during the day. The article must be kept securely stoppered; moisture and light decompose it. It is marketed also as 5-grain tablets.—Mfrs.: Bioplasm Co., New York.

BIOPLASTICA (Sereno) is a solution of lecithin specially prepared for subcutaneous use.

BIOPLASTIN is what Simriani calls a nutrient and tonic preparation consisting essentially of lecithin, iron and the phosphates of yolk of egg.

BIOS is a predigested nutrient containing albumin in the form of peptones and albumoses.

BIOSAN is an aromatic herbal syrup used as an appetizer and tonic, as well as a taste corrigent. *Biosan milk* is milk for infants' use, sweetened with biosan.—Mfr.: H. Feitzinger, Vienna VII, Austria.

BIOSON is described as an albumin-iron-lecithin compound, made from casein and containing 0.24 per cent. of iron and 1.2 per cent. of lecithin. It occurs a brownish-gray powder, not unpleasant in taste and almost completely soluble in water. Dr. M. Heim recommends it as a nutritive. Dose, 1 to 3 ozs. per day, in milk, beef-tea, etc.—Mfr.: Biosonwerke, Bensheim, Germany.

BISCINIODE is defined as *bismuth-cinchonidine iodide*. It occurs as a red powder, and is intended for internal as well as topic use as an antiseptic and astringent.

BISEDIA is the trade-marked name latterly applied to a well-known British *sedative bismuth solution* containing bismuth, pepsin and sedatives.—Mfrs.: Giles, Schacht, & Co., Clifton, near Bristol, England.

BIS-FORMA-SAL is a name constructed from *bis-muth, formaldehyde*, and *salicylic acid*, from which the product is made. Chemically, the article is defined as *bismuth methylene disalicylate*, and forms a white, odorless, insoluble powder. It is prescribed as an intestinal antiseptic and astringent; also as a vulnerary. Dose, 10 to 20 grains. See caution under *formaldehyde*.—Mfr.: Organic Chem. Mfg. Co., Philadelphia, Pa.

BISMACOL (*Bismuth Compound, Merrell*) is a liquid gastro-intestinal astringent and antiseptic, each fluid ounce of which is said to contain hydrated bismuth oxide 12 grains, magnesium salicylate from natural acid 1 grain, geranium maculatum 32 grains, pancreatin 4 grains, potassium guaiacol-sulphonate 4 grains, sodium phenolsulphonate 1 grain, chloroform 2 minims and mucilage of elm 10 grains. Dose, a tablespoonful.—Mfrs.: Wm. S. Merrell Chem. Co., Cincinnati, O.

BISMACOLA is a mixture of bismuth subnitrate, magnesium salicylate, guaiacol, pancreatin and sodium sulphocarbonate, suspended in mucilage of elm bark. It is used as an intestinal astringent and antiseptic.—Mfrs.: Wm. S. Merrell Chem. Co., Cincinnati, O.

BISMAL is chemically *bismuth methylenedigallate*, $4C_{12}H_{10}O_{10} + 3Bi(OH)_3$, and occurs as a grayish-brown, voluminous powder insoluble in the ordinary solvents, and employed as an intestinal astringent, chiefly in chronic diarrheas. Dose, 2 to 5 grains three to six times a day. See caution under *formaldehyde*.—Mfr.: El. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

BISMOLAN is a paste containing 10 per cent. of bismuth oxychloride.

BISMON is *colloidal bismuth-oxide*, "a peculiar compound of lysalbin- and protalbin-sodium and bismuth meta-hydroxide." It occurs as a reddish powder, freely soluble in water. It contains 20 per cent. of bismuth, equivalent to 22.3 per cent. of bismuth oxide. According to Dr. Kinner, it is a good gastro-interstitial tonic and antidiarrheal; he gives children 4 to 8 grains three to six times daily.—Mfrs.: Kalle & Co., Bleibrich-on-Rh., Germany; agts.: Lehn & Fink, New York.

BISMUTAL or *bismutol* is described as a mixture of soluble bismuth phosphate and sodium salicylate, which serves as a wound-antiseptic as well as antidiarrheal: one of Radlauer's preparations.—Mfr.: Apotheker Radlauer, Berlin, Germany.

BISMUTAN is an antidiarrheal remedy consisting of bismuth, resorcin and tannin, and occurring as a yellow, odorless, slightly sweet powder, which is insoluble in water. Dose for adults, 8 to 15 grains, taken as powders or in shake mixtures.—Apotheker Mindes, Zurich, Switzerland.

BISMUTH AGARICINATE, neutral, has the formula $(C_{16}H_{25}O_8)_2Bi_2$, and forms a white, tasteless powder, practically insoluble in water. It has been introduced as a remedy for intestinal catarrh and night sweats. Dose, 5 to 15 grains.

BISMUTH BETA-NAPHTHOLATE is better known on this market as *orphol* and will be referred to under that heading.

BISMUTH BITANNATE.—See *tannismuth*.

BISMUTH BOROPHENATE.—See *markasol*.

BISMUTH CHRYSOPHANATE.—See *dermol*.

BISMUTH CINNAMATE is better known by the trade name *hetoform*, which see.

BISMUTH COLLOIDAL.—See *bismon*.

BISMUTH DIBROMO-BETA-OXYNAPHTHOLATE. See *helkomen*

BISMUTH DILACTOTANNATE is the chemical designation for *lactannin*, which see.

BISMUTH DISALICYLATE is obtained by the decomposition of a solution of a normal bismuth salt with a normal salicylate, the base of which forms soluble salts with the acid of the bismuth salt, without causing any elevation of temperature which latter would provoke decomposition of the newly-formed disalicylate. The salicylic acid liberated is removed with an indifferent solvent or neutralized and dissolved out. Bismuth disalicylate occurs as a fine, white, tasteless powder having a faint sweetish after-taste. Its aqueous suspension gives a violet color reaction with ferric chloride. It contains 48 to 50 per cent. of bismuth oxide and 50 to 52 per cent. of salicylic acid. It is employed as an intestinal astringent and antizymotic. Average dose, 12 grains, one to four times daily.—Mfrs.: Heyden Chem. Works, Radebeul, near Dresden (Germany), and New York.

BISMUTH DITANNATE. See *tannismuth*.

BISMUTH DITHIOSALICYLATE is a synonym of *thioform*.

BISMUTH FORMIC IODIDE, according to the description given by the manufacturers, appears to be a mixture of glutol (formaldehyde-gelatin), aristol, and bismuth oxyiodide. It is employed as a surgical antiseptic and siccative on wounds, ulcers, burns, skin diseases, etc. See caution under *formaldehyde*.—Mfrs.: H. K. Mulford Co., Philadelphia, Pa.

BISMUTH FORMIC IODIDE COMPOUND is said to contain in each ounce acetanilide 58 grains, zinc sulphocarbonate 10 grains, bismuth subgallate 20 grains, "bismuth formic iodide" 70 grains, alum 3 grains, boric acid 100 grains, thymol, menthol, eucalyptol and inert base q. s." Its uses are the same as the preceding article.—Mfrs.: H. K. Mulford Co., Philadelphia, Pa.

BISMUTH, GALLATE, BASIC, is *bismuth subgallate*. (Now official.)

BISMUTH IODOSALICYLATE. See *iodylin*.

BISMUTH LACTOGALLATE is used like the subnitrate but chiefly in diarrhea. Dose 5 to 15 grains.

BISMUTH LORETINATE or *loretin-bismuth*, or *bismuth meta-iodo-ortho-oxyquinoline-ana-sulphonate*, occurs as a yellow, insoluble powder. It is used internally as an intestinal astringent and antiseptic, chiefly in the diarrhea of phthisis; externally, in substance, ointment or dusting-powder as a siccative wound antiseptic. Dose, usually 8 grains several times daily.—Mfrs.: Meister, Lucius & Brüning, Hoechst-on-M., Germany; agts.: V. Koechl & Co., New York.

BISMUTH METHYLENEDIGALLATE is described under *bismal*.

BISMUTH METHYLENEDISALICYLATE is the chemical name of *bisformasal*.

BISMUTH-NAPHTALIN BENZOATE will be referred to under *intestin*.

BISMUTH NOSOPHENATE. See *eudoxine*.

BISMUTH OXIDE, COLLOIDAL, is marketed as *bismon*, which see.

BISMUTH OXYIODOGALLATE is the chemical designation for *airol*, under which heading it is described.

BISMUTH OXYIODOMETHYLENEDIGALLATE is *iodomuth*, which see.

BISMUTH OXYIODOMETHYL GALLATE is described under *iodogallcin*.

BISMUTH OXYIODOTANNATE is the chemical synonym of *ibit*, which see.

BISMUTH OXYTRIIODOPHENATE. See *neoform*.

BISMUTH PHENOLSULPHONATE.—See *bismuth sulphocarbolate*.

BISMUTH PHOSPHATE SOLUBLE (*bisol*) is a water-soluble bismuth compound containing besides some sodium phosphate, 20 per cent. of bismuth oxide. It forms a white, odorless powder, of faintly alkaline taste, and is prescribed as a gastro-intestinal astringent in doses of from 3 to 8 grains several times daily.—(Nonproprietary.)

BISMUTH PROTEINATE is a synonym of *bismutose*, which see.

BISMUTH PYROGALLATE $[C_6H_2(OH)_2O]_2BiOH$, also known as *helcosol* and *pyrogallol-bismuth*, occurs as a yellow or greenish-yellow, odorless, and tasteless powder, soluble in acids but insoluble in the usual solvents; it contains 60 per cent. of Bi_2O_3 . It is employed internally as an intestinal disinfectant and astringent, and externally in certain skin diseases similarly to bismuth subgallate. Dose, 5 to 15 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

BISMUTH RESORCINATE, or *resorcin-bismuth*, is a compound of somewhat variable composition but containing about 40 per cent. of Bi_2O_3 ; a yellowish-brown powder insoluble in water. It is used in gastric catarrh, abnor-

mal gastric fermentation, and the like. Dose, 2 to 8 grains several times daily.

BISMUTH SUB-BENZOATE, or *bismuth benzoate, basic*, $\text{Bi}(\text{C}_6\text{H}_5\text{O}_2)_3 \cdot \text{Bi}(\text{OH})_3$, occurs as a white powder containing about 70 per cent. of Bi_2O_3 and insoluble in water. It is prescribed as a surgical antiseptic like iodoform, but chiefly for use in syphilitic ulcers.

BISMUTH SUBGALLATE, also known as *dermatol* and *basic bismuth gallate*, is now official in the U. S. P. and as such fully described in easily accessible works of reference.

BISMUTH SULPHOCARBOLATE, or *bismuth sulphophenate* or *phenolsulphonate*, occurs as a pale reddish powder, partially soluble in water. It has been recommended by Dr. Hugh Woods in fever patients with fetid breath and coated tongue, and in fermentative dyspepsia and typhoid fever. Dose, 3 to 8 grains three or four times a day.

BISMUTHAL is a milky liquid said to contain in each 100 c.c. "lac bismuthi citratis" (containing 7.6 per cent. of anhydrous bismuth citrate) 44 c.c., pepsin 3.5 grams, glycerin 40 grams, and small quantities of lactic acid, ginger and cherry-laurel water, and 5 per cent. of alcohol. It is used as an intestinal astringent and stomachic. This article must not be confounded with *bismutal*, or *bismutol*.—Mfrs.: National Pharmacy Co., Oakland, Cal.

BISMUTOSE (*bismuth proteinate*) is a bismuth-albumin compound that occurs as a yellowish-white, fine, odorless and tasteless powder containing 22 per cent. of bismuth, insoluble in water or alcohol, but soluble in solutions of the alkalies. It is used principally as an intestinal astringent and a protective to the mucosa of the gastro-intestinal canal, chiefly in children; to a limited extent externally in intertrigo and burns. Dose, for children under 6 months of age, 15 to 30 grains hourly; older children take a teaspoonful at a dose. On exposure to light, bismutose gradually assumes a slate-gray color; it should hence be kept protected from light.—Mfrs.: Kalle & Co., Bielebrich, German; agts.: Lehn & Fink, New York.

BISOL is a brand name for *bismuth phosphate soluble*.—Agts.: C. Bischoff & Co., New York.

BISOL is the name also adopted for a line of dressings and plasters having bismuth subnitrate as their basis.—Mfr.: Ferd. Beuleke, Hamburg, Germany.

BITUMINOL (*ammonium sulphobituminoleate*) is a recent analogue of ichthyol.—Mfr.: Chem. Fabrik Hohenzollern, Breslau III, Germany.

BLANDINE COMPOUND (*petrolatum liquidatum compositum*) contains in each uid ounce, according to the manufacturers, $1\frac{1}{2}$ grains of camphor, $\frac{1}{5}$ grain of menthol, $\frac{1}{5}$ grain of thymol, $\frac{3}{4}$ grain of eucalyptol, $\frac{1}{2}$ minims of gaultheria oil and $\frac{1}{40}$ grain of hydrastine, in liquid petrolatum. It is exploited as a rhinopharyngeal

antiseptic spray.—Mfrs.: H. K. Mulford & Co., Philadelphia, Pa.

BLAUDIUM is an iron carbonate the preparation of which is based upon the fact that the alkali bicarbonates are capable of completely converting powdered iron sulphate in concentrated trituration with glycerin or sugar solution into ferrous carbonate, alkali sulphate being formed at the same time. It has a greenish-white color, and is of microscopic fineness. It forms the basis of a number of blaudium preparations.—Mfr.: A. Flügge, Hanover, Germany.

BLENAL is the carbonic ester of *santalol* of the formula $(C_{12}H_{21}O)_2CO$, and occurs as a brownish, oily, odorless and nearly tasteless liquid, soluble in alcohol or ether, but insoluble in water. It contains about 94 per cent. of *santalol* and is employed in place of oil of sandalwood as an anticatarrhal in gonorrhea, cystitis, etc. It is slowly decomposed by the alkaline intestinal secretion into carbonic acid and *santalol*. It is apparently analogous to *santyl*. Marketed in 5-minim capsules. Dose, 1 to 3 capsules three times daily.—Mfrs.: Heyden Chem. Works, Radebeul, near Dresden (Germany), and New York.

BLENNOGONIN CAPSULES contain oil of sandalwood, extract of matico and hexamethylenamine.

BLENNOLENICET OINTMENT is an eye salve used by Dr. Adam in ophthalmic blennorrhea. It consists of 5 per cent. or 10 per cent. of lenicet incorporated in euvase lin (ceresin-vaselin).—Mfr.: Dr. Rud. Reiss, Berlin N4, Germany.

BLENNORSAN is a new name applied to the product hitherto known as *gonoryl*, the active constituent of which is said to be 33 per cent. of fluid extract of *ranjan* (*Ixora coccinea*). It is offered as an antigonorrheic and is marketed in tablet form.—Mfr.: Chem. Fabrik Erfurt, Erfurt-Ilversgehofen, Germany.

BLENNOSALYL is an antigonorrheal consisting, according to Dr. F. Zernik, of kawa-santal mixed with extract of *salix nigra*.—Mfrs.: J. D. Riedel Co., Berlin (Germany) and New York.

BLENNOSTASINE is the trade name applied to *cinchonidine dihydrobromide*, $C_{19}H_{22}N_2O(HBr)_2$. The article occurs as light-yellow, odorless, deliquescent, and very bitter prisms, that are readily soluble in water, less so in alcohol, and insoluble in ether or chloroform. It is employed chiefly in acute coryza, "colds" in the head, and hoarseness from catarrhal hypersecretion, in which affections it has a drying up effect like belladonna. Dose, 1 to 5 grains every hour according to the effect desired. It is also marketed as 1, 3, and 5-grain pills.—Mfrs.: McKesson & Robbins, New York.

BLÉNORAL (*salosavasantol*) is an anti-gonorrheal preparation for internal use. It should not be confounded with blennorrhol (protargol-gelatin bougies).

BLOOD SALT.—See *physiologic nutritive salt*.

BLUTAN is an alcohol-free, carbonated solution of acid-albumin, iron and manganese peptonate, containing 0.6 per cent. of iron and 0.1 per cent. of manganese. It is used as a hematopoietic. Marketed also as *cinchona-blutan*, containing the equivalent in cinchona alkaloids of 1 per cent. of cinchona bark; *diabetic blutan*, the same as blutan but without sugar; *iodoblutan*, carrying 0.1 per cent. of iodine; and as *bromoblutan*, carrying 0.1 per cent. of bromine. Dose, a teaspoonful to a tablespoonful—Mfr.: Chem. Fabrik "Helfenberg," Helfenberg, Germany; agts.: C. Reinschild Co., New York.

BOCAROL is an antiseptic dusting-powder containing boric acid, alum, carbolic acid, eucalyptol, methyl salicylate, menthol and thymol.—Mfrs.: Sharpe & Dohme, Baltimore, Md.

BOKOLIN is said to contain hemoglobin, milk sugar, albumin, phosphates, extractive matter, nitrogenous organic matter and mineral substances. It is offered as a hematinic, nutrient and emmenagogue.

BOLDOL is a product of the fractional distillation of boldo oil, intended for use internally in gonorrhea and hepatic affections. Further data are yet wanting.

BOLIFORMIN is a veterinary remedy described as being a condensation product of formaldehyde with aluminum silicate. It is used as a dusting-powder on wounds. See caution under *formaldehyde*.—Mfr.: Apotheker Hirschfeld, Berlin, Germany.

BONDUCIN is a bitter principle obtained from bonduc seeds. It is prescribed as a febrifuge, in doses of 1 to 3 grains..

BONE MARROW, RED, consists of more than 90 per cent. of fat. In new-born animals one-third or more of this fat is lecithin, and the marrow contains about 1 per cent. of iron. Both lecithin and iron decrease rapidly during the first few weeks after birth. The commercial preparations contain variable amounts of these constituents. Red bone-marrow is supposed to stimulate the formation of red blood-corpuscles, and has been recommended in simple and pernicious anemias.

BORACETANILID, as its name implies, is an intimate mixture of boric acid (75) and acetanilid (25). It is used as a wound antiseptic in the pure form.—Mfrs.: John Wyeth & Bro., Philadelphia, Pa.

BORAL is the name given by Leuchtner to an aluminium borotartrate occurring as white crystals that are clearly soluble in water and have a sweet-astringent taste. It is employed as a disinfectant astringent, chiefly in diseases

of the nose and throat, in substance (finely powdered) by insufflation or in solution containing some glycerin as a paint.—Mfr.: Apotheker Leuchtner, Berlin W.

BORALID is said to be a mixture of equal parts of boric acid and acetanilid. It is used as a dusting-powder, principally in eczema and chafing.

BOR-MENTHOL consists of boroglycerin and menthol.

BORNEOL BORATE is a boric acid ester of borneol having the formula $B(OC_{10}H_{17})_3$. It occurs as a white, tasteless powder possessing a faint odor of borneol. Prolonged contact with water decomposes it. Borneol borate is said to combine the therapeutic properties of boric acid and Borneo camphor.—Zimmer & Co., Frankfort-on-M., Germany; agts.: C. Bischoff & Co., New York.

BORNEOL BROMVALERATE. See *brovalol*.

BORNEOL ISOVALERATE (*bornyl valerate*), also known as *bornyval*, is a liquid used in nervous disorders and functional neuroses. Dose, 4 minims, in capsules.—(Nonproprietary.)

BORNYVAL is a trade name for *borneol isovalerate*.—Mfrs.: J. D. Riedel & Co., Berlin and New York.

BOROACETANILIDE is a finely powdered mixture of 1 part of acetanilide and 3 parts of boric acid. It is used as a dusting-powder for wounds.—Mfrs.: John Wyeth & Bro., Philadelphia, Pa.

BOROCALENDULA is "an intimate, thoroughly triturated combination of boric acid, acetanilide and the valuable astringent and healing constituents of hydrastis and calendula." It is used as a vulnerary, and as an astringent injection (1 to 2 per cent. solution).—Mfrs.: Wm. S. Merrell Chem. Co., Cincinnati, O.

BORO-CHLORETONE is a combination of 3 parts of boric acid and 1 part of chloretone, intended for use as a dusting-powder on painful wounds.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

BOROFORM is probably a mixture of boric acid and formaldehyde. It is used in substance as a dusting-powder, or in 10 per cent. ointment, in place of iodoform. See caution under *formaldehyde*.—Mfr.: Phil Röder, Vienna, Austria.

BOROGEN (*boric acid ethyl ester*) is a preparation used by inhalation through a special apparatus in the treatment of diseases of the nose, throat and lungs. It is said to become decomposed into its components by the moisture present in the pharynx, lungs, etc.—Mfrs.: Drs. Bender & Hobeln, Munich, Germany.

BOROL is an antiseptic said to be obtained by fusing a mixture of boric acid and sodium bisulphate. It occurs as odorless, colorless, glass-like lumps, soluble in water. It is used externally in 1 to 2 per cent. solutions, in diph-

theria, gonorrhea, ozena, etc.; internally in erysipelas, diphtheria, croupous bronchitis, etc. Dose, 5 to 10 grains five or six times daily.

BOROL is a name that has also been applied to an antiseptic solution, each fluid ounce of which is said to represent sodium borate 12 grains, sodium bicarbonate 12 grains, sodium benzoate 5 grains, glycerin 90 minims, eucalyptol $\frac{1}{4}$ minim, thymol $\frac{5}{16}$ grain, menthol, $\frac{1}{8}$ grain, and oil of pinus pumilio "q.s." It is applied to wounds, etc., in full strength; it is used as a gargle or irrigation diluted with 5 to 10 volumes of water.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

BOROLAN is a dermal balm consisting of boro-glycerin and lanolin.

BORO-METHYLATE is "an antiseptic salt prepared of formalin, boric acid, carbolic acid, thymol, methyl salicylate, menthol, eucalyptol, sodium baborate and sodium bicarbonate; very soluble and slightly alkaline." See caution under *formaldehyde*.

BOROPHLOGINE consists, according to the manufacturers, of "potassium iodide, glycerin, thymol, eucalyptol and menthol, combined with a specially prepared and purified base composed of silica, magnesia, and alumina." It is a smooth, plastic, surgical dressing, intended as a substitute for the ordinary poultice in the topical treatment of congestions and inflammations.—Mfrs.: H. K. Wampole & Co., Philadelphia, Pa.

BOROSAL is an aqueous solution of alum, borax, glycerin, and salicylic acid. It is employed as an antihidrotic externally.

BOROTARTROL is a product prepared from boric acid and neutral sodium tartrate.

BOROVERTIN (*hexamethylenetetramine triborate*) occurs as a white, slightly acid, water-soluble, bitter powder, containing 51.5 per cent. of hexamethylenetetramine and 48.5 per cent. of anhydrous boric acid, and soluble in about 11 parts of water and 500 parts of alcohol. It is supposed to combine the properties of its two components, and hence is used as a urinary antiseptic and disinfectant. Dose, 5 to 10 grains several times daily. It should be noted that the use even externally of formaldehyde preparations or of compounds that may produce it involves a possibility of bad effect on eyesight, it having been suggested that the poisonous and sight-destroying effect of wood alcohol is due to its decomposition into formic acid in the system, which acid may be produced from formaldehyde, it being an intermediate product in the change of wood alcohol to formic acid. The acid may also be liberated from formates.—Mfr.: Actiengesellschaft für Anilinfabrikation, Berlin; agts.: Lehn & Fink, New York.

BORSALYL is said to be a mixture of 25 parts of boric acid and 32 parts of sodium salicylate; an antiseptic.

BORSYL is a powder used in excessive perspiration. It is reported to consist of 1 part of borax, 0.5 part of spermaceti, 28 parts of boric acid, 69.5 parts of talcum and 1 part of cetyl alcohol.—Mfr.: Chem. Fabrik "Borsyl," Dahme, Germany.

BOVININE is advertised as "a condensed beef juice prepared by a cold process." According to analyses made at the chemical laboratory of the American Medical Association, it is "a mixture of alcohol (8 per cent.), glycerin, added sodium chloride and apparently some form of defibrinated blood." It is exploited not only as a nutritive but also as a wound cicatrizant.—Mfrs.: Bovinine Co., New York.

BOVOVACCINE is Prof. von Behring's antitubercular substance used for the prevention of tuberculosis in cattle.—Mfrs.: Behringwerk, Berlin, Germany; agts.: C. Bischoff & Co., New York.

BRADON is an elixir said to contain as its active ingredients fluid extracts of valerian, artemisia, orange, melissa and adonis, besides bromides. It is employed as a nervine and antispasmodic.—Mfr.: Dr. Lutzsche Apotheke, Göppingen, Germany.

BRANDOL is described as a decoction of nettleweed containing 2 per cent of picric acid and 5 per cent. of glycerin, and recommended as an application to burns. Mfr.: Karl Hofbauer, Dortmund, Germany.

BRANDSANAL is a burn remedy consisting, according to the manufacturers, of carbolic acid, picric acid, water and glycerin.

BRASANT CAPSULES are keratinized or salol-coated capsules containing oil of sandalwood.—Mfr.: Breslau Capsule Works, Breslau, Germany.

BRASSICON is a Russian topical headache remedy consisting of a mixture of 2 grams of peppermint oil, 6 grams of camphor, 4 grams of ether, 12 grams of alcohol and 6 drops of oil of mustard.

BRAUSAN are compressed briquets for use in preparing carbonic-acid and boric-acid (or, rather, borax) baths at one and the same time. These bath bricks are also supplied with a sulphur or iron base.—Mfrs.: Chem. Fabrik, Helfenberg, Germany; agts.: C. Reinschild Co., New York.

BRENCZAIN is the terse name applied to *guaiacol benzylic ether* or *pyro (brenz) catechin methylbenzyl ether*. It occurs in white crystals, soluble in alcohol, ether or vasogen; insoluble in water. It is said to possess the advantages of gualacol without its irritant action. It is used, however, chiefly in the production of local anesthesia by cataphoresis.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

BRENCZ (PYRO) CATECHIN DIMETHYL ETHER.—See *veratrole*.

BRENZ (PYRO) CATECHIN ETHYL ETHER is a synonym of *guethol*, and will be referred to under that title.

BRENZ (PYRO) CATECHIN METHYL-BENZYL ETHER is described under *brenzcain*.

BRENZ (PYRO) CATECHIN MONO-METHYL ETHER is the well-known *guaiacol*.

BROMACETANILID is described under *antisepsin*.

BROMALBACIDE (*brominated albumin*) is a bromide substitution compound of albumin. It occurs as a yellowish-white powder, soluble in water; and is used as a substitute for the alkali bromides whenever these are not well borne. Dose, 5 to 15 grains. Mfr.: L. W. Gans, Frankfort-on-M., Germany; agts.: Mathieson & Co., New York.

BROMALBIN is a bromine-albumin compound of French origin intended as a substitute for the alkali bromides.—Mrs.: Adrian & Cie, Paris, France; agts.: E. Fougere & Co., New York.

BROMALIN, or *bromethylformin*, or *hexamethylenetetramine bromethylate*, $(\text{CH}_2)_6\text{N}_4\text{C}_2\text{H}_5\text{Br}$, results from the action of ethyl bromide upon hexamethylenetetramine. It occurs as white crystals, soluble in water. It is used as a substitute for the alkali bromides in doses of 30 to 60 grains several times daily. See caution under *formaldehyde*.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

BROMAMIDE is chemically *tribromanilin hydrobromide*, $\text{C}_6\text{H}_4\text{Br}_3\text{N.HBr}$. It forms colorless, odorless, tasteless needles, soluble in chloroform, ether, or oils, insoluble in water, and sparingly soluble in cold alcohol. It has been employed as an anodyne and antineuralgic in doses of 10 to 15 grains.

BROMANILID is referred to under the synonym *antisepsin*.

BROMATOL is an emulsion of cod liver oil and bromoform, put forward for whooping cough and other affections of the upper air-passages. It contains 1 drop of bromoform in every cubic centimeter.—Mfrs.: R. Dietrich & Co., Zurich, Switzerland.

BROMDIETHYLACETAMIDE.—See *neuronal*.

BROM-EIGON will be described under the collective title *eigons*.

BROMEINE is a French designation of *codeine hydrobromide*.

BROMELIN is a digestive enzyme obtained from the pineapple (*bromelia ananas*), stated to be similar in action to pepsin and papain.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

BROMETHYLFORMIN is a synonym of *bromalin*.

BROMETONE is the terse name applied to *tribromotertiary-butyl alcohol*, $\text{CBr}_3.2\text{CH}_3.\text{COH}$, resulting from the

action of caustic alkali upon a mixture of bromoform and acetone. It occurs as fine, white crystals of camphoraceous odor and taste, readily soluble in alcohol, ether or chloroform, and but slightly soluble in water. It is used as a nerve-sedative and antispasmodic. Dose, 5 to 10 grains, in capsules of syrup.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

BROMIDIA has been described as a mixture containing in each fluid dram 15 grains each of potassium bromide and chloral hydrate, 1 grain each of extract hyoscyamus and extract cannabis indica, 5/16 drop of anise oil, with water and syrup and a small quantity of acacia. It is used as a nerve sedative and hypnotic. Dose, 1 fluid dram, in water.—Mfrs.: Battle & Co., St. Louis, Mo.

BROMILE is the hydrobromide of some undefined organic base, occurring as large, white scales containing 24 per cent. of bromine, and intended as a substitute for the alkali bromides, especially hypodermically; 45 grains correspond to about 15 grains of potassium bromide.

BROMINE-IODINE COMPOUND is a preparation introduced some years ago by Dr. C. W. Ingraham, of Binghampton, N. Y., as a means of treating pulmonary tuberculosis hypodermically. The solution is said to consist of iodine $\frac{1}{2}$ grain, bromine $\frac{1}{4}$ grain, phosphorus 1/100 grain, thymol $\frac{1}{8}$ grain, menthol $\frac{1}{8}$ grain and sterilized oil 1 fluid dram. The remedy was first exploited only among physicians, but was later advertised to the public; but as a mixture represented by the formula given did not lend itself to administration by the mouth, it was still later again advertised only among physicians.—Mfrs.: Bromine-Iodine Chem. Co., San Diego, Cal.

BROMINOL is a brominized sesame oil, like *bromipin*, introduced by Wm. Martindale of London.

BROMIPIN is a bromine addition product of sesame oil, in which the unsaturated fatty acids or their glycerin esters are partially transformed into saturated bromine-substituted fatty acids or their glycerides. It occurs as a yellow, oily liquid in the main similar in physical properties to sesame oil, and is recommended as an efficient substitute for the alkali bromides in epilepsy, cardiac palpitation, etc., whenever the latter drugs give rise to disturbances. It contains 10 per cent. of bromine. Dose, 1 to 4 drams, three or four times daily. It is generally prescribed in capsules. Bromipin gets turbid when exposed to a low temperature, and should hence be kept in a moderately warm place in winter.

BROMIPIN SOLID, SACCHARATED, is dried bromipin in tablet form, each of which represents 1.2 grams of 33 $\frac{1}{3}$ per cent. bromipin (equivalent to 0.6 gram of potassium bromide).—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

BROMLECITHIN is a compound of bromine and lecithin containing about 30 per cent. of Br, occurring as brown, waxy masses, and claiming to be more assimilable than lecithin pure besides having sedative action. It is used in nervous diseases. Dose, 1 to 3 grains three times a day, in pills.—Mfrs.: Actiengesellschaft für Anilinfabrikation, Berlin, Germany; agts.: Lehn & Fink, New York.

BROMLECITHIN RICHTER is a dark-brown waxy mass, readily soluble in oils, ether or chloroform. It contains about 22 per cent. of bromine, and is used like bromolecithin.—Mfr.: Gideon Richter, Budapest, Hungary.

BROMO-ALBUMIN is described under its more common designation, *bromosin*.

BROMOCARPINE is said to be a combination of pilocarpine with bromides.

BROMOCHINAL or *acid dibromosalicylate of quinine*, $C_{20}H_{24}N_2O_2(C_6H_4Br_2.OH.CO_2H)_2$, forms yellowish, bitter crystals that are sparingly soluble in water, alcohol, or ether. According to its introducer, Prof. v. Noorden, 0.6 to 0.75 gram given twice daily lowers elevated temperature similarly to 0.5 gram of quinine hydrochloride, and it has besides a sporific effect in febrile patients.—Mfrs.: Zimmer & Co., Frankfurt-on-M., Germany; agts.: C. Bischoff & Co., New York.

BROMOCHLORAL is a liquid hypnotic and sedative, each fluid dram of which is said to contain chloral hydrate 15 grains, potassium bromide 15 grains, extract cannabis indica $\frac{1}{8}$ grain. Dose, a teaspoonful.—Mfrs.: Wm. S. Merrell Chem. Co., Cincinnati, O.

BROMOCOLL is a bromine-tannin-gelatin compound containing 20 per cent. of bromine organically combined. It forms a yellowish, odorless, tasteless powder; insoluble in the usual solvents, but soluble in alkaline fluids. It is another of the modern succedanea for the alkali bromides being used in epilepsy and other nervous affections; it is also used externally as an antipruritic in various skin diseases, and is hence marketed also as a 20 per cent. ointment (with resorbin as the base), 10 per cent. solution (effected with the aid of borax 6, to 10 of bromocoll), dusting-powder, suppositories, and soap. Bromocoll, *soluble* contains borax as the solvent adjunct.—Mfr.: Actiengesellschaft für Anilinfabrikation, Berlin, Germany; agts.: Lehn & Fink, New York.

BROMOFARINA is a flour containing bromide and used for making bread known as *bromopan*.—Mfr.: Max Friedländer, Berlin C., Germany.

BROMOFORM (*formyl* or *methenyl tribromide*; *tribromomethane*), $CHBr_3$, is now official and as such fully described in easily accessible works of reference.—(Non-proprietary.)

BROMOGLIDINE is a compound of bromine and glidine, insoluble in water or alcohol, and marketed as tab-

lets each containing $\frac{3}{4}$ grain of bromine. It is offered as a succedaneum for the alkaline bromides. Dose, 1 to 3 tablets three times a day.—Mfr.: V. Klopfer, Dresden-Leubnitz, Germany; agts.: Menley & James, New York.

BROMOHEMOL, or *hemol bromide*, is hemol with 2.7 per cent. of bromine; a brown, insoluble powder, introduced as an easily assimilable nerve tonic and sedative. Dose, 15 grains three times a day.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

BROMOL.—See *tribromphenol*.

BROMOLEIN is the name applied to a sterilized addition-product of the unsaturated fatty acids of almond oil. The article occurs as a yellow, odorless, oily liquid, containing 20 per cent. of bromine, and used subcutaneously where bromides are ordinarily employed. Dose, $\frac{1}{2}$ to 2 drams.

BROMOPAN is bread made from bromofarina and containing 1 gram of bromide to the loaf. It is intended for use by epileptics.—Mfr.: Apotheker Bela Hoffmann, Pest, Hungary.

BROMOPHENACETIN, $C_6H_5Br.OC_2H_5.NHCOCH_3$, occurs as colorless crystals melting at about $115^{\circ} C.$, readily soluble in alcohol, and sparingly so in water. It was introduced as a sedative and analgesic, but little mention of it has as yet been made in literature. Dose, 10 to 20 grains.

BROMOPHOR (*bromofor*) is a preparation said to contain as its active ingredient dibromlarizinoic acid. Painted upon the skin it leaves a film which is believed to contain 25 per cent. of bromine. It is intended for use in pruritic affections of the skin and in wound erysipelas.—Mfr.: Chem. Fabrik Paul Stoepel, Elberfeld, Germany.

BROMO-PROTOLINE is a compound of albumin and bromine (10 per cent.), occurring as a granular powder insoluble in the ordinary solvents but soluble in alkaline solutions. It is used in place of potassium bromide when this is not borne well, and in similar doses. Marketed also as 5-grain tablets.

BROMOPYRIN is a designation applied to two different articles. The commoner is chemically *monobrom-antipyrin*, $C_{11}H_{11}BrN_2O$, occurring as white crystals soluble in alcohol or chloroform but insoluble in water; it is occasionally prescribed as a sedative and antipyretic, in place of antipyrin, and in the same dose. The other bromopyrin is of French origin, and consists of a granular effervescent mixture of caffeine hydrobromide, antipyrin, and sodium bromide. Dose, 1 to 2 drams.

BROMOSIN (*bromo-albumin*) is a compound of bromine and albumin, containing 10 per cent. of bromine; a yellowish-white powder, intended to replace the alkali bromides in certain cases. Dose, $\frac{1}{2}$ to 2 drams.—Mfr.: Löwen-apotheke, Kassel, Germany.

BROMOTAN (*bromtannin-methylenurea*) is described as "a condensation product of formaldehyde, bromtannin and urea." It occurs as a fine, bulky, yellowish-brown, odorless powder which is insoluble in water, and is offered as an antiseptic and antipruritic dermic and vulnerary. It is used chiefly in 10 per cent. dusting-powder or ointment.—Mfr.: Dr. A. Voswinkel, Berlin W.

BROMOTHYMIN is a whooping cough remedy stated to consist of ammonium, potassium and sodium bromides, bromoform, and compound syrup of thyme.—Mfr.: Dr. A. Kopp, Strassburg, Germany.

BROMOVOSE is a liquid containing bromine organically combined with albumin. It does not contain alcohol or hydrobromic acid. It is intended for use when alkaline bromides are indicated.

BROMPEPTONE (*peptobromeigon*) will be referred to under the eigons.

BROMPHENOL, or *monobromphenol*, will be referred to to under the latter title.

BROM-PROTYLIN.—See under *protulin*.

BROM-SALIFEBRIN.—See *antinervin*.

BROMURAL is the trade name adopted for *monobromisovalerianyl-urea* a condensation product of isovalerianic acid and bromisovalerianyl bromide. It occurs as white, nearly tasteless needles, readily soluble in alcohol and alkali solutions, sparingly soluble in water and melting at about 145° C. It is offered as a nerve sedative and mild hypnotic. Dose, 3 to 10 grains, as tablets (so marketed).—Mfrs.: Knoll & Co., Ludwigshafen-on-Rh. (Germany) and New York.

BROMVALIDOL is the name applied to tablets, each dose of which contains 1 gram of sodium bromide, 0.1 gram of calcined magnesia and 5 drops of validol. The combination is designed as a sedative in nervous conditions.—Mfrs.: Zimmer & Co., Frankfurt-on-M., Germany; agts.: C. Bischoff & Co., New York.

BROMYL is an English designation for the article known on this market as *bromalin* (hexamethylene-tetramine-ethyl bromide), a formaldehyde compound. See *caution* under formaldehyde.

BRONCHILINE is a plaster spread on flannel, which is said to consist of a rubber base medicated with belladonna, chamomile, grindelia, thyme, oil of peppermint, oil of rosemary and camphor. It is put forward as a remedy in whooping cough.—Mfr.: J. Büttner-Wobst, Zittau, Germany.

BRONCHISAN consists, according to O. Kuhn, of 40 per cent. of pyrenol (a mixture of thymol, sodium benzoate and sodium salicylate), with anise oil, ammonia water and extract of licorice.—Mfr.: Dr. J. Silberstein, Berlin NW, Germany.

BRONCHITIN is a cough remedy consisting of syrup of thyme and thiocol, and recommended particularly in phthisis and chronic bronchial catarrhs. Dose, daily, 3 to 5 teaspoonfuls; for children, 1 to 3 teaspoonful per day.—Mfrs.: Lüdy & Cie, Burgdorf, Switzerland.

BROVAL. Under this name a sedative is marketed consisting of the bromides of potassium, sodium and ammonium and the fluid extracts of valerian and serpentaria.

BROVALAN is an effervescent salt containing menthol valerate, bromides, etc.

BROVALOL (*bornyl bromvalerate; borneol bromisovaleric acid ester*), $\text{CH}_3\text{CH}(\text{CH}_3)\text{CHBr.COO}(\text{C}_{10}\text{H}_{17})$, is obtained by esterification of borneol with bromisovaleric acid or its derivatives. It is known in Germany as *valisan*. It occurs as a colorless, oily liquid containing 25.2 per cent. of bromine, having a faint, aromatic odor, and soluble in alcohol, chloroform and ether, but insoluble in water. It is used as an analeptic, antispasmodic and nerve. Dose, 4 to 12 grains. Marketed only in 4-grain capsules (pearls).—Mfr.: E. Schering, Berlin; agts.: Schering & Glatz, New York.

BRYONIN is a glucoside of bryonia alba, first isolated by Walz. It forms an amorphous, brownish-yellow, bitter powder, soluble in water or alcohol. Formerly it was very generally considered physiologically inert, but more recently some investigators have ascribed laxative and alterative properties to it, and have used it in hepatic congestion, chronic inflammation of the serous membranes and convalescence after acute infectious diseases. Statements as to the dose vary considerably. Some say give 1-32 grain every two hours until some effect on the bowels is produced, then 1-64 grain every three or four hours thereafter; others say $\frac{1}{6}$ to $\frac{1}{8}$ grain.—(Nonproprietary.)

BURGER'S DIGESTIVE SALT contains magnesium sulphate, magnesium tartrate, sodium bicarbonate, sodium bitartrate, sodium citrate and magnesium citrate.

BURNHAM'S SOLUBLE IODINE, according to analyses made in the chemical laboratory of the American Medical Association, is essentially "a solution of iodine in alcohol rendered miscible with water by the presence of some iodide." It is used as an alterative. Dose, 3 to 10 minims. Marketed also as tablets said to represent 3 minims each.—Mfrs.: Burnham Soluble Iodine Co., Auburndale, Mass.

BUTIPYRINE or *butyprinum* is identical with *trigemin*, a compound of pyramidon and butyl-chloral hydrate used mainly as an antineuralpic.—Mfrs.: G. R. Fritz-Petzold & Süss, Vienna, Austria.

BUTYLCHLORAL-HYDRATE-PYRAMIDON will be described under the trade name *trigemin*.

BUTYL-HYPNAL, or *butyl-chloral-antipyrin*, $\text{C}_{11}\text{H}_{11}\text{N}_2\text{O} \cdot \text{C}_4\text{H}_5\text{Cl}_3\text{H}_2\text{O}$, is a compound of butyl-chloral hydrate and

antipyrin occurring as colorless, transparent needles that melt at 70° C. and are soluble in alcohol, ether, chloroform, or water (about 30 parts). It was introduced as a hypnotic and analgesic, but has not met with much favor. Dose, 10 to 30 grains.

BUTYROMEL is a mixture introduced as a succedaneum for cod liver oil and is stated to be composed of 2 parts of fresh unsalted butter and 1 part of honey.

BUXINE is a synonym of *bebeerine*.

BYNIN is a thin malt extract of English manufacture.—Mfrs.: Allen & Hanbury, London, Eng.

BYNOL is a malt extract with cod liver oil made by the same firm that makes bynin.

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CACAOOPHEN is a nutritive consisting of cacao, powdered legumins and dextrinized rice flour. It contains 12.17 per cent. of fat and 26 per cent. of protein.—Mfr.: A. Siebert, Cassel, Germany.

CACHETS DU DR. FAIVRE are said to contain oxyquinoline and are put forward for the treatment of migraine and rheumatic pain.

CACODOL, also designated as "cacodylate of iron compound," is a liquid preparation, each fluid dram of which "contains the equivalent of one-twelfth grain of cacodylic acid and one-twentieth grain iodine." It is prescribed as an alterative in various chronic diseases.

CACODYLIACOL is a contraction of *guaiacol cacodylate*, which see.

CAD-FORMASAL is the cadmium salt of formasal, or *cadmium methylene-disalicylate*. It is used as an ointment (1 in 7 of lanolin) in the treatment of scrofulous glands, frostbite and chronic inflamed joints. See caution under *formaldehyde*.—Mfrs.: Organic Chem. Co., Philadelphia, Pa.

CADMIUM SALICYLATE, $\text{Cd}(\text{C}_7\text{H}_5\text{O}_3)_2 + \text{H}_2\text{O}$, occurs as white needles, of sweet, astringent taste, and soluble in water or alcohol. It is used as an astringent in eye diseases and gonorrhoea.

CADMIUM SULPHATE, $\text{CdSO}_4 + \text{aq.}$, occurs as white, transparent crystals that are soluble in water and in alcohol. It is used as an antiseptic astringent like zinc sulphate.—(Nonproprietary.)

CADMIUM SULPHOCARBOLATE, *sulphophenate* or *para-phenolsulphonate*, $\text{Cd}(\text{C}_6\text{H}_4\text{SO}_3)_2 + \text{H}_2\text{O}$, occurs as white crystals, soluble in water or alcohol. It was introduced a few years ago by Baldacini for use in certain eye diseases, but nothing has since appeared on it in medical literature.

CADUSOL is a 20 per cent. solution of cade oil in vasogen.—Mfrs.: Société fédérale des Pharmaciens de France, Paris.

CAFFEINE SODIOCINNAMATE, or *caffeine-sodium* and *sodium cinnamate*, is obtained by evaporating a solution of 10.6 grams of caffeine and 8.5 grams of sodium cinnamate (hetol) in 40 c.c. of warm water, as a white, odorless, bitter, alkaline powder, soluble in 2 parts of water and 50 of alcohol. It is intended to replace the well-known caffeine sodiosalicylate hypodermically. The article is also known as *hetol-caffeine*.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CAFFEORESCORCIN is a compound of caffeine and resorcin as yet not more fully described.

CAF-FORMASAL is defined by the manufacturers as "caffeine methylene-disalicylate of an alkali;" minute white crystals which are readily soluble in water, moderately so in alcohol. It is prescribed in chronic nephritis, and in rheumatism and gout associated with a weak heart action; also in lithemic headache. Dose, 5 to 20 grains. See caution under *formaldehyde*.—Mfr.: Organic Chem. Co., Philadelphia, Pa.

CALCALITH is a mixture containing calcium and lithium salts together with colchicine in aromatic combination.—Mfrs.: Abbott Alkaloidal Granule Co., Chicago, Ill.

CALCIDIN is a new trade name applied to the old-fashioned iodized lime so long used in croup. The article occurs as a bluish-black powder having the odor of iodine. According to analyses made at the chemical laboratory of the American Medical Association, it is "essentially a mixture of iodine, calcium iodide, lime and corn starch, the calcium iodide and some iodate being formed by the action of the lime on the iodine."—Mfr.: Abbott Alkaloidal Co., Chicago, Ill.

CALCINOL is a fanciful name of *calcium iodate*, under which heading it will be described.

CALCIUM BETA-NAPHTOLSULPHONATE.—See *asaprol*.

CALCIUM BORATE is a light, white powder, soluble in hot water. It is used internally chiefly in diarrhea of children and externally in weeping eczema, fetid perspiration, chafing, etc., in 10 to 20 per cent. ointments or dusting-powders. Dose, for children, 1 to 5 grains.—(Non-proprietary.)

CALCIUM CACODYLATE, or *calcium dimethyl-arsenate*, has the formula $[(CH_3)_2AsO_2]_2Ca + aq.$, and forms a white powder soluble in water. It is employed as an alternative similar to arsenous acid. Dose, $\frac{1}{2}$ to 2 grains.

CALCIUM CARBIDE, CaC_2 , which, as is known, is used chiefly for generating acetylene gas, has been recommended by some in the treatment of inoperable cancer of

the cervix and vagina. For this purpose a piece as large as a pea to a nut is left in the vagina overnight. The usefulness of this treatment has been disputed by many. Calcium carbide must be kept well protected against moisture, as water decomposes it, evolving acetylene and leaving slaked lime.—(Nonproprietary.)

CALCIUM CHLORIDE, CaCl_2 , is familiar to pharmacists as far as physical properties are concerned, being official. While formerly employed internally only in rachitis, arthritis, and chronic itching, it has in late years come into prominence as a means of arresting persistent bleeding, internally as well as topically. For this purpose it is given in doses of 10 to 20 grains several times daily, and applied locally in 1 to 15 solution.—(Nonproprietary.)

CALCIUM DIMETHYLENE-ARSENATE is a synonym of calcium *cacodylate*, which see.

CALCIUM EOSOLATE, $(\text{C}_6\text{H}_4\text{S}_2\text{O}_{12})_2\text{Ca}_3$, is the calcium salt of trisulpho-acetyl-creosote. It is a grayish powder, of slightly pungent and ethereal odor, and acrid empyreumatic taste; soluble in about 10 parts of water, very slightly soluble in alcohol, but insoluble in chloroform, and readily soluble in hydrochloric, citric and some other organic acids. It represents approximately 25 per cent. of creosote. It has been used by Dr. H. Stern in diabetes and ulcerative phthisis. Dose, 5 to 20 grains three times a day.—Mfrs.: Berlin Capsule Works, Berlin, Germany; agts.: Fischer Chem. Importing Co., New York.

CALCIUM GLYCERINO-ARSENATE is described under *arsitriol*.

CALCIUM GLYCERINOPHOSPHATE, $\text{PO}_4\text{O}_2\text{CaO.C}_3\text{H}_5(\text{OH})_2$, also known by the brand name *neurosin*, occurs as a white powder, soluble in about 40 parts of cold water, and almost insoluble in boiling water or alcohol. It is the salt of glycerinophosphoric acid most used—in rickets, wasting diseases, and convalescence from infectious diseases. Dose, 2 to 5 grains three times daily in syrup or simple solution. It should not be dispensed in solution with carbonates, phosphates or lead salts, as decomposition is likely to ensue; and its solutions do not keep well and should hence be prepared only in small quantities at a time. Citric acid increases the solubility of the compound.—(Nonproprietary.)

CALCIUM GUAIACOL-SULPHONATE. See *guaiacyl*.

CALCIUM HIPPURATE is a white, crystalline powder soluble in about 27 parts of water and employed as a uric-acid solvent and antirheumatic. Dose, 5 to 20 grains.—(Nonproprietary.)

CALCIUM HYDROCHLOROPHOSPHATE is marketed only in 25 per cent. solution, which occurs as a yellowish liquid of the specific gravity of 1.225 at 15° C., and miscible with water. It is used in tuberculosis, scrofula, rickets, etc. Dose, 5 to 15 drops three times daily in

water.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CALCIUM IODATE, $\text{Ca}(\text{IO}_3)_2 \cdot 6\text{H}_2\text{O}$, is also known by the trade name *calcinol*. It occurs as a white powder or small crystals, soluble in about 400 parts of water and insoluble in alcohol. It is employed as an internal antiseptic in cystitis and gastro-intestinal fermentation, and externally in diphtheria and in ulcers and in other lesions in which iodoform is usually applied. Dose, 3 to 5 grains three times a day.—(Nonproprietary.)

CALCIUM LACTATE, $\text{Ca}(\text{C}_2\text{H}_3\text{O}_2)_2 \cdot 5\text{H}_2\text{O}$, occurs as white, odorless granules or crystalline masses, soluble in about 15 parts of water. It was formerly employed only as an alternative tonic in scrofula and allied cachexias, but has latterly come into prominence as a substitute for calcium chloride in conditions referable to defective blood coagulability, as a preventive of post-operative hemorrhage in nose and throat surgery, and in such blood dyscrasias as boils, urticaria, hemoglo-minuria, etc. The ordinary adult dose is 15 to 20 grains three times daily, before meals, in solution; children take proportionately less according to age.—(Nonproprietary.)

CALCIUM LACTOPHOSPHATE is a combination of calcium lactate and phosphate. It is marketed in two forms: *crystalline*, forming white, hard scales, soluble in water and containing 1 per cent. of phosphorus; and *powder*, insoluble in water. It is used as an alternative and antica-thetic. Dose, 3 to 10 grains three times a day.—(Nonproprietary.)

CALCIUM MONOBROMBEHENATE. See *sabromine*.

CALCIUM ORTHO-GUAIACOLSULPHONATE is *guaiacyl*, which see.

CALCIUM PERMANGANATE, also known as *monol* and *acordol*, was introduced as a more agreeable and yet more powerful substitute for the potassium salt as a mouth-wash and internal disinfectant in diarrheas of children. It occurs as brownish-violet, very deliquescent crystals, readily soluble in water. Dose for children, $\frac{1}{2}$ to 2 grains.—(Nonproprietary.)

CALCIUM PEROXIDE or **SUPEROXIDE** (or *gorit*), $\text{CaO}_2 \cdot 4\text{H}_2\text{O}$, occurs as a yellow powder, slightly soluble in water with the evolution of oxygen. It has been recommended as an antacid and disinfectant in acid dyspepsia and summer diarrhea in children. Dose (children's), 3 to 10 grains per day, according to age. It is used also as a topical application in diphtheria.—Mfrs.: Roessler & Hasslacher Chem. Co., New York.

CALCIUM SACCHARATE, $\text{C}_{12}\text{H}_{22}\text{O}_{11} \cdot 3\text{CaO}$, occurs as an amorphous, white powder, soluble in water, and is used as an antidote in poisoning by the mineral acids, also as an antacid and antixymotic. Dose, 30 to 300 grains. It is

also marketed under the trade name antacedin.—(Non-proprietary.)

CALCIUM SALICYLATE, $(C_7H_5O_2)_2Ca + 2H_2O$, occurs as a white, odorless, tasteless powder or crystals, sparingly soluble in water, more freely so in carbonated water. It is prescribed chiefly in gastroenteritis and summer diarrheas of children, in doses of 5 to 20 grains.—(Nonproprietary.)

CALCIUM SULPHOICHTHYOLATE. See *ichthyl-calcium*.

CALCUSOL is described as a combination of piperidine parasulphaminebenzoate and potassium carbonate, and is intended as a remedy for rheumatic gout.

CALLAQUOL is a turbid, milky liquid of pleasant aromatic odor, consisting, it is stated, of an ester of oxy-tricarballic acid in combination with a special soap solution containing oil of thyme mainly to cover the disagreeable odor of the chief constituent. It is employed principally as a lotion on compresses and as a wash for wounds.—Mfr.: Chem. Fabrik Fr. Braun, Nürnberg, Germany.

CALLIANDREIN is described as a glucoside of calliandra grandiflora, a Mexican shrub. It is a white, odorless, water-soluble powder, whose aqueous solution froths on shaking and emulsifies many substances. It has been used in intermittent fever; ten $\frac{3}{4}$ -grain pills in the course of twenty-four hours.

CALMIN is described as a compound (?) of antipyrin and heroin, and is extolled for use in whooping-cough, asthma, dysmenorrhea, etc. Dose, 8 to 15 grains; for children, $\frac{3}{4}$ to 5 grains according to age.—Mfr.: Chem. Laboratorium Gropingier, Osterode, Germany.

CALMYREN is the name applied to sugar-coated pills said to contain extract of valerian, iron and quinine citrate, camphor, pepsin, and extract of condurango. They are put out for use in neurasthenia, hysteria and cardiac neuroses.—Mfr.: Apotheke zur Austria, Vienna, Austria.

CALODAL or *kalodal* is a dietetic prepared from meat, and intended for use subcutaneously or by enema as well as per os. It contains 95 per cent. of readily soluble albuminous substances, and small quantities of meat salts (especially phosphates, traces of iron, and 0.2 per cent. of NaCl). It forms a yellowish-brown powder, which is easily but slowly soluble in water and almost odorless and tasteless. Dose, about 1 dram.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

CALOMELOL, or *colloidal* or *soluble calomel*, is a whitish-gray, odorless, tasteless powder, soluble in alcohol, ether, benzene and water, and yielding therewith a milk-like fluid. It contains 80 per cent. HgCl and 20 per cent. albuminous substances. It is recommended by Galewsky

as a dusting-powder in syphilitic ulcers, as moist 2 per cent. dressings, and as 30 per cent. ointment by inunction in syphilis (1 to $1\frac{1}{2}$ drams per inunction).—Mfr.: Heyden Chem. Works, Radebeul (Germany) and New York.

CALOMELOL-OPIUM tablets contain $\frac{1}{6}$ grain of calomel (colloidal or soluble calomel) and $1/10$ grain of opium, and are used in syphilis.

CAMPACOL is stated to be a condensation product of camphoric acid, formaldehyde and guaiacol, or the camphoric acid ester of methylene-diguaiacol. It is a crystalline substance, intended for use especially in phthisis, but also employed in pneumonia, broncho-pneumonia, and cystitis. Dose, 5 to 20 grains; maximum daily dose, 2 drams. It is marketed also as $2\frac{1}{2}$ and 5-grain tablets. See caution under *formaldehyde*.—Mfrs.: Organic Chem. Co., Philadelphia, Pa.

CAMPHENOL is a liquid disinfectant and antiseptic described as "an emulsion or saponification of the three higher cresols and camphor," and claimed to be non-poisonous, noncorrosive and nonstaining.—Mfr.: Johnson & Johnson, New Brunswick, N. J.

CAMPROID is a substitute for collodion introduced by Martindale, and said to consist of a solution of pyroxylin and camphor in absolute alcohol.—Mfr.: Wm. Martindale, London, Eng.

CAMPHOPHENIQUE is claimed by the manufacturers to be composed of phenol 49 per cent. and camphor 51 per cent. Examinations of specimens made at the laboratory of the American Medical Association seem to show that it contains approximately 20 per cent. of phenol, about 38 per cent. of camphor and the balance in liquid petrolatum. It is an antiseptic and anodyne. Camphophenique Powder was found by analysis made at the same laboratory to consist of about "92 per cent. of talcum, the remainder being chiefly camphor with a small amount of phenol."—Mfrs.: Camphophenique Co., St. Louis, Mo.

CAMPHORETTIN is the name applied to tablets containing $7\frac{1}{2}$ grains of synthetic camphor.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

CAMPHORIC ACID METHYL ESTER is the outcome of efforts to produce a form of camphor for internal use that shall be more quickly and more freely absorbed than the customary preparations of camphor. The neutral modification is said to be the only therapeutically valuable one. It has the formula $C_{10}H_{14}(COOCH_3)_2$. It occurs as a colorless, clear, oily liquid, having the specific gravity of 1.075 at 20° C., a faintly aromatic odor, and a cooling bitter taste. It is said to be very quickly and completely absorbed by the skin, and to be a good solvent of camphor, menthol, thymol and other medicaments. Its indications are those of camphoric acid and of camphor.

CAMPHORIC ACID PHENETIDID is a remedy combining the properties of camphoric acid and phenacetin, and hence used as an antihidrotic and febrifuge. Dose, 8 to 20 grains.

CAMPHORIN is artificial camphor.

CAMPHOROFORM is a combination of camphor and iodoform, also known as *iodoform-camphor* or *yellow camphor*; a yellow powder in which the odor of iodoform predominates. It is recommended as a surgical antiseptic, and has also been used in diphtheria, whooping-cough and influenza.

CAMPHOROXYL is a 3 per cent. solution of hydrogen peroxide containing about 32 per cent. of alcohol and 1 per cent. of camphor to enhance its antiseptic power and at the same time render it more stable. It is used (generally in 10 to 15 per cent. dilutions) in ozena, pharyngitis, otitis and other affections in which ordinary hydrogen dioxide solution is employed.—Mfr.: C. Raspe, Weissensee, near Berlin; agts.: C. Bischoff & Co., New York.

CAMPHORZONE is a liquid alkaline antiseptic marketed by the Camphorzone Co., Chicago, Ill.

CAMPHOSAN is neutral santalol ester of camphoric acid, or *santalol camphorate*, of the formula $C_{24}H_{34}(CO_2)_2$ ($C_{15}H_{23}$)₂. It occurs as a brownish-yellow oil, easily soluble in alcohol, chloroform or ether, and exhibits a faintly aromatic odor and a slightly bitter taste. It is put forward as a remedy in prostatic, urethral and bladder troubles, similarly to oil of sandalwood. Dose, 5 to 15 minims, in capsules (so marketed).—Mfrs.: J. D. Reidel Co., Berlin (Germany) and New York.

CAMPHOSSIL is the designation that has been applied to a condensation product of camphor and salicylic acid, of Italian origin. The article occurs as a white, crystalline, fatty, deliquescent mass, of camphoraceous odor, almost tasteless, and insoluble in water. It is administered in doses of 8 grains as an antipyretic and internal disinfectant (principally in typhoid fever and infectious diarrhea).

CANCROIDIN (Schmidt) is prepared from pure cultures obtained from human carcinomas and used by injection for diagnostic purposes. Dose, 1/2400 grain as the minimum.—Mfrs.: Bakt.-Chem. Laboratorium W. Schmidt, Cologne, Germany.

CANCROIN is a serum introduced by Prof. Adamkiewicz as a remedy in cancer. According to Heermann, it is essentially a carbolized 25 per cent. solution of neurine citrate; cancroin II consists of equal parts of cancroin (I) and distilled water; and cancroin III of 1 part of cancroin (I) and 3 parts of distilled water. While the introducer has reported some remarkable curative effects from the

use of his preparation, Nothnagel, von Eiselberg, Poten and others have failed to observe any such action from its employment.

CANDOL is a dry extract of malt claimed to be unusually rich in diastase, and hence recommended as a digestive addition to tonics. Dose, $\frac{1}{2}$ to 2 teaspoonfuls thrice daily.

CANNABINE TANNATE is obtained from Indian hemp, after removal of the ethereal oil by distillation with steam, by extraction with water and precipitation with tannin. It is a brownish powder of slightly bitter but very astringent taste; soluble in alkalinized water or alcohol. It is used as a mild hypnotic and a nerve sedative. Dose, 5 to 15 grains; maximum dose, 15 grains.—Mfr.: E. Merck, Darmstadt; agts.: Merck & Co., New York.

CANNONIN is a disinfectant mixture of unknown composition.

CAPILLIN is what Mindes calls a condensation product of tannin, chloral hydrate and resorcin, which is intended as a succedaneum for captol.

CAPRENALIN is the name adopted by John Wyeth & Bro., Philadelphia, Pa., for *epinephrine* as made by them.

CAPRINA is what D. Konev calls a prophylactic against smallpox in sheep, which is obtained from goats previously artificially infected with the virus of sheep's smallpox.

CAPSICIN is a terse name for oleoresin capsicum (official).

CAPSICOL is "a solidified embrocation representing oleoresin capsicum, camphor, croton oil, turpentine oil, aromatic and antiseptic oils, with a base of especially prepared petroleum and purified animal fat with olive oil." It is offered as a local counter-irritant, in 2-oz. collapsible tubes.—Mfr.: Norwich Pharmacal Co., Norwich, N. Y.

CAPSIPHOR is a capsicum plaster for dental purposes.—Mfr.: Chem. Fabrik "Helfenberg," Helfenberg, Germany; agts.: C. Reinschild Co., New York.

CAPSITOL, put forward as an external remedy for the treatment of rheumatism and gout, is said to consist of an aromatic tincture of capsicum to which menthol has been added.

CAPSULES, DIURETIC OIL, introduced by Dr. R. Kobert; each contain $1\frac{1}{2}$ minims of a mixture of equal parts of oils of juniper, lovage, angelica and jaborandi leaves, apiol, saflor, guaiacol, terpineol and borneol. They are intended to be used in place of the old-fashioned diuretic teas in dropsy, vesical catarrh, etc. Dose, 2 to 4 capsules several times daily.—Mfrs.: Schimmel & Co., Miltitz, near Leipsic, Germany; agts.: Fritsche Bros., New York,

CAPSULES GELODURATED is the trade name adopted for gelatine capsules hardened with formaldehyde so that they will pass through the stomach unchanged and disintegrate only on reaching the intestines.—Mfr.: G. Pohl's Capsule Works, Schönbaum, Germany.

CAPTOL is a condensation product of tannin and chloral. It occurs as a brown, amorphous, hygroscopic powder, which is soluble in hot water or in alcohol; alkalis decompose it. It was introduced by Eichhoff as an antiseborrheal remedy as well as a prophylactic, and is used mostly as a compound spirit (so marketed in this country), consisting of a solution of 2 parts each of captol, chloral hydrate, and tartaric acid, and 1 part of castor oil, in 200 parts of 65 per cent. alcohol.—Mfr.: Ferd. Mühlens, Cologne, Germany; agts.: Mühlens & Kropf, New York.

CAPUDINE is a brown, rather syrupy liquid, with an aromatic odor and salty taste. On analysis at the laboratory of the American Medical Association, "capudine was found to contain, besides 8 per cent. of alcohol, sugar, aromatics, chlorides, caffeine (about $10\frac{1}{2}$ grains per fl. oz.), antipyrine (about $8\frac{1}{2}$ grains per fl. oz.) and salicylates (equivalent to 14 grains of salicylic acid per fl. oz.)." It is exploited as a headache remedy. Dose, a teaspoonful to a dessertspoonful.—Mfr.: Capudine Chem. Co., Raleigh, N. C.

CARBENZYME TABLETS contain charcoal and trypsin, and are employed as an antizymotic and carminative.—Mfr.: Drs. Freund & Redlich, Berlin NW, Germany.

CARBOFORMAL is a German disinfectant remedy consisting of carbolic acid and formaldehyde solution. See caution under *formaldehyde*.—Mfr.: Max Elb, Dresden, Germany.

CARBOFORMAL BRIQUETS ("Glühblocks") are hexagonal coal-briquets containing a cavity filled with paraformaldehyde. When lighted, they glow, whereby the chemical is reconverted into formaldehyde gas.—Mfr.: Max Elb, Dresden, Germany.

CARBOLLYSOFORM is a new disinfectant preparation stated to consist of 2 parts of crude cresol (Ph. G.), and to be an efficient germicide in 3 per cent. solution.

CARBONEOL is a substance obtained by dissolving coal-tar in carbon tetrachloride and evaporating. It occurs as a thin, black liquid of not unpleasant odor and a specific gravity of 1.328. It is offered as an application in skin diseases, especially eczema.—Mfr.: Hirsch-Apotheker, Frankfurt-on-M., Germany.

CARBONOL is a perfectly white, odorless, tasteless liquid petrolatum for internal or external use.—Mfr.: Wm. S. Merrell Chem. Co., Cincinnati, O.

CARBOSANT is the trade name applied to the *carbonic acid ester of santalol*, or *santalol carbonate*, $C_{31}H_{48}O_2$. The

product is a nearly tasteless and odorless oil-like liquid, soluble in oils and in alcohol, ether or chloroform, but insoluble in water. It contains about 90 per cent. of santalol, and is used as a succedaneum for sandalwood oil. Dose, 10 to 15 minims three times a day, with hot milk or in capsules. Marketed also in 5-minim capsules.—Mfrs.: Heyden Chemical Works, Radebeul, near Dresden (Saxony), and New York.

CARBOTERPIN is a solution of coal-tar in terpinol, occurring as a dark brownish-red liquor of not unpleasant odor and of the specific gravity of about 0.910. It is used in skin diseases, particularly psoriasis.—Mfr.: Hirsch-Apotheke, Frankfort-on-M., Germany.

CARDINE is a liquid extract of cardiac muscle used by Dr. Hammond in chronic affections of the myocardium and in asytle.

CARDIOL is said to be an alcoholic extract of squill, lobelia, strophanthus and nux vomica with guaiacol.

CARDIOTONIN is said to consist essentially of the cariotonic principles of convallaria and caffeine sodio-benzoate. It is employed as a diuretic and a cardiac tonic, in doses of 1 to 2 c.c. of the standardized solution in which form it is marketed.—Mfrs.: Degen & Kuth, Düren, Germany.

CARGENTOS is defined as "a colloidal silver oxide containing about 50 per cent. of metallic silver." It forms black, shining, odorless, tasteless scales, soluble in all proportions in water and glycerin, forming solutions that are reddish-brown by transmitted light and greenish-black by reflected light. It is employed as a bactericide and astringent, like silver nitrate; mostly externally in 5 to 25 per cent. solutions, rarely internally in gastric ulcer and the like. Dose, 1 to 2 grains.—Mfr.: H. K. Mulford Co., Philadelphia, Pa.

CARNIFERRIN (*iron phosphosarcosylactate*) is prepared from meat, and contains about 30 per cent. of iron and 1 per cent. of phosphorus in combination. It occurs as a reddish-brown, tasteless powder, soluble in dilute acids or alkalis. It has been recommended as an easily assimilated hematinic for use in anemia and chlorosis. Dose, 5 to 10 grains; children, 1 to 5 grains, three times daily. It appears to have been withdrawn from this market. It was formerly sold by V. Koechl & Co., New York.

CARNIFERROL is an aromatic liquid preparation containing 10 per cent. of meat peptone and 0.4 per cent. of iron.

CARNIGEN is a soluble nutrient in pulverulent form. According to Denayer, it consists of 52 per cent. of albuminoids, 24 per cent. of meat extractive, and 4 per cent. of meat salines. (It is not to be confounded with carnogen, a liquid preparation of bone-marrow, used as a "blood-builder.")

CARNINE is a French preparation represented by the makers as "the juice of rare meat, prepared by cold process. Each tablespoonful represents 100 grams of raw meat." According to an analysis made at the chemical laboratory of the American Medical Association, "carnine consists of a small proportion of defibrinated blood dissolved in a mixture of syrup and glycerin, the whole agreeably flavored."—Agts.: E. Fougere & Co., New York.

CARNOSE is a nutritive extract prepared from yeast and malt.—Mfr.: O. Overbeck, Grimbsley, Eng.

CAROBEAT is a cough remedy, essentially consisting of a syrup prepared from St. John's bread.

CAROID is a brand of the active digestive principle of the juice of the papaw (*carica papaya*), which substance is on the market also under various other trade names. It is active in acid, neutral, or alkaline media, but particularly so in the last-named. Dose, 2 to 5 grains. Is also marketed as tablets in various combinations.—Mfrs.: Parnele Pharmacal Co., New York.

CAROL is a mouth-wash similar to the older *odol*.

CAROPAN (from *caro* and *panis*) is a pulverulent mixture of equal parts of somagen and malt extract. It is readily and completely soluble in water, and has a taste reminding one of malt and "zwiebach." It is put forward as a nutrient.—Mfr.: Dr. A. Wolff, Bielefeld, Germany.

CARPINE (*naphtho-sulphur cream*) contains as its therapeutically active ingredients betanaphthol and sulphur, and is offered as an antiparasitic application for use on the skin and the scalp.—Mfrs.: Hudson & Co., New York.

CARSEL is what a London firm calls its analogue of Carlsbad salt.

CARVACROL IODIDE will be described under its more usual title of *iodocrol*. (Uncombined carvacrol [oxycymol], a thick aromatic liquid, has been used by instillation in toothache).

CASANTHROL is the name applied by Unna to a mixture of his casein ointment with 10 per cent. of "extractum lithanthracis" (that is, the ether and benzol-soluble constituents of coal tar). It occurs as a thick emulsion which is soluble in water; applied to the skin, it forms a dry, elastic coating. It is used in eczema, prurigo, etc. Mineral acids, acid salts and other substances that coagulate casein, should not be mixed with it or at most to the extent of not more than 1 per cent.

CASCARIN is a substance isolated by Leprince from cascara sagrada and considered by him as the active principle of the drug. It occurs as odorless, tasteless needles, insoluble in water but soluble in alcohol. It is given to adults in doses of 2 to 5 grains, usually in pills; children in proportion.—Marketed by E. Fougere & Co., New York.

CASCARINO, a tea exploited for the treatment of obesity, contains senna, sambucus, rhubarb, bladderwrack, frangula, cascara sagrada, taraxacum, anise and fennel.

CASCAROPHEN is the name applied to tablets each containing cascarin 1/6 grain, strychnine sulphate 1/80 grain, leptandrin 1/12 grain, emetine 1/67 grain, and phenolphthalein 1/2 grain. They are used as a laxative. Dose, 1 to 3 tablets.—Mfrs.: Abbott Alkaloidal Granule Co., Chicago, Ill.

CASEIN-ALBUMOSE SOAP as a neutral, superfatted soap recommended by Delbanco as a base for other medicated soaps as well as per se as a dermic in eczema, etc.

CASEIN-SILVER is *argonin*.

CASEIN-SODIUM is a food marketed as *nutrose*, under which heading it will be described.

CASEIN TANNATE.—See *tannocasum*.

CASEIODINE is what Liebrecht calls an iodine derivative of casein, occurring as a white powder that is insoluble in the usual solvents but soluble in dilute alkalies and contains about 8 per cent. of iodine. According to Prof. Kocher, it is of service in goiter.

CASEON is a synonym of *plasmon*.

CASIMIROA EDULIS. A new hypnotic is marketed said to be prepared from a plant named as above, the habitat assigned being Mexico. The customary claim of "no bad after effects" is made for it, a claim which, from past experience with all hypnotics, is untenable.

CASSARIPE is the name applied to the inspissated juice of the root of *manihot utilisima* or bitter cassava, which when first exploited was used in corneal ulcers and certain other eye diseases (pure or in 10 per cent. ointment). It seems to have fallen into oblivion.

CASTANTHUS is a liquid laxative and cholagogue, each fluid dram of which represents cascara sagrada 15 grains, leptandrin 1/8 grain, and chionanthus 5 grains. Dose, 1 to 2 teaspoonfuls.—Mfr.: Wm. S. Merrell Chem. Co., Cincinnati, O.

CASTOREUM-BROMIDE (Weigert) is the name applied to a granular, effervescent combination said to consist of potassium bromide, sodium bromide, ammonium bromide, extract of valerian, extract of castoreum and effervescent powder. It is offered as an antiepileptic, nerve sedative and antineuralgic.—Mfr.: Æsculap-Apotheke, Breslau, Germany.

CASTOR-LAX is a pulverulent form of castor oil, the absorbent being magnesia. It is offered as a tasteless form of castor oil. Dose, 1 to 2 teaspoonfuls.—Mfr.: Castor-Lax Co., New York.

CASUMEN is an English food product which, according to Coblenz, consists wholly of casein.

CATALYSINE is defined as "a compound of lecithin bases obtained by a special process and combined with hemoglobin iron." It is offered for use in neurasthenia and infectious diseases.

CATHAROL is a 3 per cent. solution of hydrogen peroxide.

CEALGIC is said to be a mixture of acetanilide, citrated caffeine, ammonium chloride, neurodin, sodium bicarbonate and digitalin. It is put forward as an antipyretic and anodyne.—Mfrs.: Porter-Ryerson-Hoobler Co., Omaha, Neb.

CEARIN is an ointment-base introduced by Issleib and consisting of 1 part of white carnauba wax, 3 parts of ceresin and 16 parts of liquid paraffin.—Mfrs.: J. D. Riedel Co., Berlin (Germany) and New York.

CEDRARINE is synonymous with *phenzoline* or *orexine*.

CELLASIN is a product said to be "derived from fungi; a metabolic ferment which splits sugar, starch, fat and peptone"; supposed to be active in the alkaline media of the intestines, blood and tissues; not affected by the stomach acidity. According to analyses made under the auspices of the American Medical Association, cellasin is "a mixture of an acid-producing organism and a protein substance, presumably casein." It occurs as a brownish-white powder, soluble in alkaline liquids. It is specifically recommended for diabetes and the early stages of tuberculosis. Dose, 3 to 15 grains.—Mfrs.: Mead Johnson & Co., Jersey City, N. J.

CELLOTROPIN (*monobenzoyl-arbutin*) $C_{15}H_{20}O_8$ results from action of benzoyl chloride upon arbutin in neutral solution. It is a white, odorless, tasteless powder; soluble in about 1300 parts of water, easily so in alcohol, and insoluble in ether or chloroform. It is intended for use in infectious diseases (especially tuberculosis and scrofula). Dose, 4 to 8 grains three times daily.—Mfrs.: H. Finzelberg's Nachf., Andernach, Germany.

CEPHAELINE HYDROCHLORIDE, $C_{14}H_{19}NO_2 \cdot HCl$, is the salt of a second alkaloid found by Dr. Paul in ipecac. It occurs as a yellowish powder, soluble in water or alcohol, and is recommended as an emetic in doses of $1/12$ to $1/6$ grain.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CEPHALIN is reported to be a mixture of 5 parts each of antipyrin and roasted coffee, and 2 parts each of caffeine sodium salicylate; a headache remedy. Dose, 5 to 10 grains.

CEPHALOPIN is an oily extract of fresh nerve substance, containing the myelin, lecithin and other oily constituents of the nerve tissue. It is used subcutaneously in strychnine poisoning; internally in neurasthenia, neuralgia, etc.

CERALIN (not cerolin) is an ointment "containing boric acid and the valuable antiseptic constituents of benzothymol"; used as antiseptic, antipruritic and emollient.—Mfrs.: Sharpe & Dohme, Baltimore, Md.

CEREBRIN is an extract of the gray matter of the brain of calves, used in chorea, hysteria, and other affections of the nervous system and in alcoholism. Dose, 3 to 5 grains three times a day. Marketed also as tablets of 3 and 5 grains each. (It is not to be confounded with the definite nitrogenous, phosphorus-free constituent of brain matter known as "cerebrin," which has the formula $C_{80}H_{100}N_2O_{15}$ and is not used therapeutically.)—Mfrs.: A. Poehl & Sons, St. Petersburg, Russia; agts.: Lehn & Fink, New York.

CEREBRINE is the name given to an antineuralgic mixture consisting essentially of an alcoholic solution of antipyrin, caffeine and cocaine.

CEREDINE is an unsaturated fatty acid isolated by Roos and Hinsberg from yeast and regarded by them as the active principle. It is proposed as an alternative with laxative action.

CEREGEN is defined as "a theoretically perfect proteid-phosphate nerve-food; almost tasteless, and soluble in warm water."—Mfrs.: John Bell, Hills & Lucas, London, S. E., England.

CEREVISINE is a dried medicinal yeast, "desiccated yeast cultures prepared from the cells of the saccharomyces cerevisiæ at a low temperature and in a vacuum." It occurs as a granular powder, and is recommended for use internally in boils, tuberculosis, and diabetes, and locally in leucorrhea, vaginitis, etc. Dose, a teaspoonful before meals, given in water with a little sugar. Used externally in 5 to 20 per cent. suspension or paste.—Mfr.: Vial, Paris; agts.: Fougura & Co., New York.

CEROLIN is described as the fatty substance of yeast, and has been recommended for internal use in furunculosis, acne and the like. It is marketed as 0.1 gram pills, 3 to 5 of which constitute the daily dose.—Mfrs.: C. F. Böhringer & Söhne, Mannheim, Germany; agts.: Merck & Co., New York.

CEROMENTUM is *menthol-eucerin*, and is exploited "for the cutaneous treatment of tuberculosis of the lungs according to the method of Court Councillor Dr. K. Stepp."—Mfrs.: Eucerin Fabrik, Aunund (near Bremen), Germany.

CEROSE is an expectorant and bronchial sedative, each fluid ounce of which contains codeine phosphate $1\frac{1}{2}$ grains, ipecac 1 grain, horehound $2\frac{1}{2}$ grains, wild cherry $2\frac{1}{2}$ grains and eucalyptus 1 grain. Dose, a teaspoonful every three or four hours.—Mfr.: John Wyeth & Bro., Philadelphia, Pa.

CETHAL is said to be cinnamylmethyl, with 10 per cent. of thymol. It is employed by inhalation through a special apparatus in the treatment of pulmonary affections.—Mfrs.: Goedecke & Co., Berlin; agts.: Schering & Glatz, New York.

CETIACOL. See *palmiacol*.

CETOSAN is a mixture of petrolatum and the alcohols contained in spermaceti, Chinese wax and beeswax (which alcohols are said to impart water-absorptive properties to the ointment base), and 30 per cent. of water. *Anhydrous cetosan* is the water-free base.—Mfr.: Hirsch-Apotheker, Frankfurt-on-M., Germany.

CETRARIN, or *cetraric acid*, $C_{30}H_{30}O_{11}$, is the bitter principle of Iceland moss (*cetraria islandica*). It occurs as a white crystalline powder or very small needles, sparingly soluble in water, more freely in solutions of alkali carbonates. It is prescribed chiefly in anemia and chlorosis. Dose, 1 to 3 grains several times a day.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CHELAFRIN is another trade name applied to the vaso-constrictive principle of the suprarenal capsule. Marketed in 1:1000 solution of its hydrochloride. For description, see *epinephrine*.—Mfrs.: Hoeckert & Michalowsky, Berlin SW, Germany.

CHELIDONINE PHOSPHATE, SULPHATE and **TANNATE**, are salts of the alkaloid of chelidonium, which has the formula $C_{20}H_{19}NO_5 + H_2O$. They occur as white or nearly white crystalline powders soluble in water. They are used as mild narcotics, particularly in children—in gastric and intestinal pains; also in gastric ulcer and cancer of adults. Dose (adults'), 1 to 3 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CHEVADOL (*terpin hydriodide*) is an iodoform succedaneum apparently identical with *iodoterpin*, which see.

CHIBROMANCO, CHLORBROMECO, CHLOREUSAR, and **CHLORIOKREO**.—See under *nebulates*.

CHIELIN is described by the manufacturers as an oily extract of tulip bulbs, and extolled in various skin diseases. According to others, it is essentially a superfatted, strongly alkaline soda soap, and "chielin cream," a mixture of zinc oxide, talcum, chielin, wool fat, tincture of benzoin, water and glycerin.—Mfr.: "Chielin," Berlin, Germany.

CHIFERRIN or *chinaferrin* is a tonic preparation said to contain iron in organic combination and the active principles of cinchona and condurango.—Mfr.: J. Weirich, Strassburg, Germany.

CHINA-BLUTAN (*cinchona-blutan*) is referred to under *blutan*.

CHINALGEN is *quinalgen*.

CHINAPHENIN, chemically *quinine carbonic-acid phenetidin*, or *phenetidin quinine carbonate*, $C_{20}H_{25}N_3O_4$, occurs as a white, odorless, tasteless powder, readily soluble in alcohol, ether, or chloroform, but sparingly soluble in water. It forms salts with acids. Prof. von Noorden places it between quinine and acetanilid or phenacetin in promptness of action as an antipyretic. He has used it in whooping-cough, typhoid fever, malarial neuralgia, etc. It is given in the same doses as quinine sulphate.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York; and Zimmer & Co., Frankfort-on-M.; agts.: C. Bischoff & Co., New York.

CHINAPHTOL, or *quinine beta-naphthol-monosulphonate*, will be described under *quinaphtol*.

CHINASEPTOL, or *quinaseptol*, is better known by the trade name *diaphtol*, and will be referred to under that title.

CHINOFORM was first described as a compound of cincho-tannic acid and formaldehyde. The name has been recently applied to *quinine formate*. See caution regarding formaldehyde and formates under formaldehyde.

CHINOFORMIN is the trade name of *formin* (hexamethylenetetramine) *quininate*, which compound is better known here as *chinotropin*; see this.

CHINOPYRIN (*quinine-antipyrin*) is what Dr. G. Santesson calls a combination of 3 parts of quinine hydrochloride and 2 parts of antipyrin. It occurs as a white powder, readily soluble in water and hence specially intended for subcutaneous use in malaria. Dose, 5 to 20 grains.

CHINORAL is described as an oily, very bitter fluid, soluble in water or alcohol, and consisting chiefly of chloral and quinine. It is used internally in delirium tremens, and externally as an antiseptic. Dose, 5 to 15 grains.—Mfr.: K. Meyer, Altona, Germany.

CHINOSOL is the trade name applied to normal *oxyquinoline sulphate*, $(C_9H_7ON)_2H_2SO_4$. It occurs as a yellow powder, of saffron-like odor, and pungent, astringent taste; soluble freely in water and in alcohol or ether. It is intended for use as a surgical and household antiseptic chiefly, but has been used in a very small way internally in gastro-intestinal diseases. It is applied in 1 in 100 to 1 in 2,000 solutions, according to purpose. Alkalies decompose chinosol; and with corrosive sublimate, iron and other metallic salts it forms highly-colored compounds having staining properties. It is marketed also as tablets containing 15 grains. Dose, 5 grains three times daily. —Mfrs.: Franz Fritsche & Co., Hamburg; agts.: Parmelee Pharmacal Co., New York.

CHINOTHEIN is prepared by condensing equimolecular parts of quinine and antipyrine with the addition of 5 per cent. of caffeine.

CHINOTROPIN (*urotropin* or *hexamethylenetetramine quinate*) occurs as a white powder readily soluble in water. It is employed in gout and bacilluria, similar to the older urotropin (formin, aminoform, cystogen, hexamethylene-tetramine, etc.), but is said to liberate formaldehyde in the system more freely than the latter. Dose, $7\frac{1}{2}$ to 20 grains two or three times daily, as tablets (so marketed). See caution under *formaldehyde*.—Mfr.: E. Schering, Berlin, Germany; agts.: Schering & Glatz, New York.

CHIROL is a yellowish fluid stated to consist of a solution of certain resins and fatty oils in a mixture of low boiling alcohols and ethers. It is intended mainly as a hand disinfectant and protective in surgical and obstetrical practice. Applied to the skin, it forms a thin impermeable coating.—Mfrs.: J. D. Riedel Co., Berlin (Germany) and New York.

CHIOSOTER is a solution of certain waxes and balsams in carbon tetrachloride. It is intended for use as an antiseptic surgical dressing and protective, like colodion.—Mfrs.: Krewel & Co., Cologne, Germany.

CHLORAL-ACETONE-CHLOROFORM is described under *cloran*.

CHLORAL-ACETOPHENONE-OXIME forms colorless crystals that are readily soluble in alcohol or ether but insoluble in water. It is recommended as an antispasmodic and nerve sedative.—Mfr.: A. C. Jensen, Frankfort-on-M., Germany.

CHLORALAMIDE is a German trade name for the now official *chloralformamide* (formamidated chloral). Marketed also as an elixir containing 30 grains to the fluid ounce. See caution under *formaldehyde*.—Mfr.: E. Schering, Berlin, Germany; agts.: Lehn & Fink, New York.

CHLORAL-ANTIPYRINE.—See *hypnal*.

CHLORALBACID is defined as a chlorine substitution product of albumin, containing 3 per cent. of chlorine intramolecularly combined. It occurs as a yellowish-white powder, easily soluble in water and without unpleasant odor or taste. It is used in gastro-intestinal affections characterized by insufficient secretion of hydrochloric acid or abnormal formation of organic acids, or by insufficient intestinal absorption or peristalsis. Dose, 15 to 30 grains before meals. Marketed also as $7\frac{1}{2}$ -grain tablets.—Mfr.: Ludw. W. Gans, Frankfort-on-M., Germany; agts.: Mathieson & Co., New York.

CHLORALBIN is a chlorine-albumin compound made by Adrian & Co., Paris, France; agts.: E. Fougera & Co., New York.

CHLORAL-HYDROXYLAMINE.—See *chlorosonine*.

CHLORALIA is a liquid hypnotic, sedative and sudorific preparation, containing in each fluid ounce 5 grains of kal-

arine, 96 grains of chloral hydrate, and 1 grain each of extracts of conium, hyoscyamus and cannabis indica. Dose, 30 to 60 minims.—Mfrs. Penn Pharm. Co., Philadelphia, Pa.

CHLORALIMIDE (not chloralamide), or *trichlorethylidene-imide*, $\text{CCl}_3\text{CH:NH}$, results from heating chloral-ammonium or chloral hydrate with dry ammonium acetate. It forms white, odorless, tasteless crystals, soluble in alcohol, ether, or chloroform; insoluble in water. It was introduced as an agreeable hypnotic and analgesic especially in insomnia due to headache or fever, but it has been practically abandoned in this country. Dose, 15 to 45 grains; maximum daily dose, 90 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CHLORALIN. See *chlorolin*.

CHLORAL-ORTHOFORM is a compound of molecular quantities of chloral and meta-amido-para-oxybenzoic ester (orthoform, or [formerly] orthoform "new"). It forms yellow, tasteless crusts that can easily be reduced to powder; soluble in ether or hot alcohol, insoluble in water. It is intended as a hypnotic. Dose, 8 to 15 grains.—Mfrs.: Kalle & Co., Blebrich-on-Rh., Germany; agts.: Lehn & Fink, New York.

CHLORALOSE, chemically *anhydro-gluco-chloral*, $\text{C}_6\text{H}_{11}\text{Cl}_2\text{O}_6$, is obtained by heating anhydrous chloral and glucose together. It occurs as small white crystals, of disagreeable, bitter taste; readily soluble in alcohol or ether, sparingly so in water. It has been recommended as a hypnotic. Dose, 3 to 10 grains; maximum dose, 12 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CHLORETHOFORM (*chloræthoform*) is the name proposed in England for pure chloroform admixed with $\frac{1}{4}$ per cent. of ethyl chloride, which addition is claimed to yield a preparation less dangerous than chloroform alone as a general anesthetic.

CHLORBUTANOL (*acetone-chloroform*; *trichlor-tertiary-butyl alcohol*), $\text{C}_4\text{H}_9\text{OCl}_3$, is produced by the reaction of acetone on chloroform. It occurs as small, white, volatile crystals, of camphoraceous odor and taste, and soluble in alcohol, ether, chloroform or glycerin, and sparingly soluble in water. It is employed as a local anesthetic, anodyne and nerve sedative; also as a preservative of medicamentous solutions. Dose, 5 to 20 grains. As a local anesthetic a concentrated aqueous solution is used. (See *chloretone*, *methaform*.)

CHLORETONE is a trade name for *acetone-chloroform*, *tertiary trichlorbutyl alcohol* or *chlorbutanol*, described herein under the latter title.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

CHLOROBROM is an English specialty consisting essentially of a solution of 3 parts each of potassium bromide

and chloralformamide in 29 parts of water, and used mainly in seasickness, but also as a hypnotic. Dose, a table-spoonful.

CHLORO-BROMON, originally called *bromo-chloron*, is defined as a hypobromo-chlorite of lime of the formula BrClO_2Ca ; an unstable, alkaline compound, marketed as a concentrated solution (in 20 c.c. vials) "containing in their nascent condition bromine, chlorine and free oxygen." It is used as a germicide and antiseptic—topically pure or diluted, and internally in the dose of several glassfuls per day of a dilution of 20 c.c. with 1 gallon of lime water.

CHLOROGENINE (*alstonine*) is an alkaloid from the bark of *alstonia constricta*, of the formula $\text{C}_{21}\text{H}_{20}\text{N}_2\text{O}_4 + 3\frac{1}{2}\text{H}_2\text{O}$. It occurs as a brown powder soluble in alcohol or chloroform, and is used as an antiperiodic and febrifuge.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CHLOROIODOLIPOL is defined as a chlorine substitution product of phenol, creosote and guaiacol, which is used by inhalation in chronic affections of the respiratory tract.

CHLOROL is a French liquid disinfectant consisting in the main of corrosive sublimate, sodium chloride, hydrochloric acid and copper sulphate, in aqueous solution.

CHLOROLIN (*chloralin*) is a liquid disinfectant containing about 20 per cent. of mono- and trichlorphenol and used in $\frac{1}{2}$ to 3 per cent. solutions as a surgical and gynecological disinfectant and antiseptic. Marketed also as pills each containing $\frac{1}{30}$ grain of chlorophenol for employment in tuberculosis.—Mfr.: J. Weirich, Strassburg, Germany.

CHLOROSONIN (*chloral-hydroxylamine*) is a compound of chloral hydrate and hydroxylamine, which separates into its components in the presence of water. It is intended as a hypnotic. Dose, 10 to 15 grains.

CHLORPHENOL SALICYLATE.—See *chlorsalol*.

CHLORSALOL (*chlorosalol* or *para-chlorsalol*), $\text{C}_6\text{H}_4\text{OH}\cdot\text{COOC}_2\text{H}_4\text{Cl}$, results from reaction between phosphorus pentachloride and a mixture of parachlorphenol and salicylic acid. Chemically it may be defined as *salicylic-acid-para-chlorphenol ester*. It is used in cystitis, diarrhea, etc., in place of salol. Dose, 1 to $1\frac{1}{2}$ drams in the course of a day.—(Nonproprietary.)

CHLORYL is a British trade name for pure *ethyl chloride* as made by Duncan, Flockhart & Co., London, Eng.

CHOCORICIN is said to contain 70 per cent. of castor oil with cocoa, sugar, etc., but no phenolphthalein. It is marketed in the form of sticks.

CHOCOSANA is a cod-liver oil preparation containing chocolate as a disguiser of the taste of the oil, and said to contain also some lecithin, phosphoric acid and calcium

phosphate. It is marketed in round sticks.—Mfrs.: Chocosana Co., Stuttgart, Germany.

CHOLAUXAN consists, according to B. Schürmayer, essentially of an emulsion of non-alcoholic fluidextracts of chelidonium, taraxacum and liverwort, expressed oil of almonds, sodium oleate, validol, methyl salicylate, glycerin, alcohol, "essence of coca" and "carminative elixir." It is put forward as a gall-stone remedy.—Mfr.: Löwenapotheker, Stuttgart, Germany.

CHOLAX is an alkaline cholagogue salt.—Mfr.: Kelvan Co., Philadelphia, Pa.

CHOLEGLYCERIN is a name for a solution of pancreatin and pepsin in glycerin.

CHOLELITH pills are said to consist of acid sodium oleate, natural salicylic acid, phenolphthalein and menthol. They are put forward as a cholagogue particularly in cholelithiasis.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

CHOLELITHMIN is essentially a weak alcoholic solution of the salts and albuminous constituents of bile obtained from animals that have fed on fresh bile. It is used in gall-stone colic.—Mfr.: Institute Marpmann, Leipzig, Germany.

CHOLELITHON is a "gall-stone salt" said to consist of potassium citrate, sodium bicarbonate, lithium sulphate and magnesium sulphate.—Mfr.: Apotheker Ringler, Aschaffenburg, Germany.

CHOLELITHURIN is a preparation of the fresh bile of animals fed with the biliary secretion; essentially a weak-alcoholic solution of the bile acids and albuminoids. It is intended for use in gallstone colic.

CHOLELYSIN is a cholagogue marketed in dry (tablet) form, said to consist of 13 to 20 per cent. of albumin combined with sodium oleate. Cholelysin *liquid* is reported to contain about 20 per cent. of sodium oleate together with validol, tincture valerian, pineapple essence and peppermint water.—Mfr.: J. E. Stroschein, Berlin; agts.: Fischer Chem. Importing Co., New York.

CHOLERA SERUM is referred to under *serums*.

CHOLEROL is the name under which *enteronol* tablets are being advertised to the laity as a diarrhea remedy. Further information is given under *enteronol*.

CHOLITON is a preparation exploited for the treatment of gall-stones. An analysis showed the presence of the following ingredients: lithium carbonate, sodium carbonate, tartaric acid, sugar, and moisture.

CHOLOGEN is the name applied to three different preparations, in tablet form, known respectively as chologen 1, 2, and 3. These are said to be different "combinations of mercury with vegetable laxatives and cholagogues (podophyllin) and carminative and antispasmodic drugs

and oils (melissa, camphor, caraway)." They are intended for use in gall-stone disease.—Mfr.: Hugo Rosenberg, Berlin W., Germany.

CHOLOGESTIN is a liquid cholagogue and intestinal digestive, each dose of which, a tablespoonful, is said to contain 2 grains of sodium salicylate made from natural salicylic acid, $2\frac{1}{2}$ grains of pancreatin and 5 grains of sodium bicarbonate. It is also marketed in tablet form under the name "tablogestin."—Mfrs.: F. H. Strong Co., New York.

CHOLOSAN. See *lithosan*.

CHRESYLATIN is an alkaline, aromatic liquid, said to contain resin soaps, naphthalin and cresol, and heralded as a succedaneum for carbolic acid.

CHROATOL is defined as *terpin iohydrate*, and is used in certain skin diseases.

CHROMIAC TABLETS are said to contain chromium sulphate 2 grains, zinc phosphide $1/10$ grain, extract nuxvomica $\frac{1}{8}$ grain, cannabin $1/10$ grain, cantharides $1/12$ grain, and avenine $1/200$ grain. They are prescribed as an aphrodisiac. Dose, 1 tablet after meals and at bedtime.—Mfrs.: Maltbie Chem. Co., Newark, N. J.

CHROMIUM SULPHATE, $\text{Cr}_2(\text{SO}_4)_3$, occurs as dark-green scales, soluble in water. Formerly used only technically, it has latterly been recommended by Dr. Louis Kolopinski, of Washington, D. C., for trial in cases of neurasthenia, exophthalmic goiter, locomotor ataxia, climacteric disturbances, etc. Dose, 4 to 8 grains three or four times daily, usually as tablets.—(Nonproprietary.)

CHRYSAROBIN OXIDIZED is obtained from the action of sodium peroxide upon chrysarobin suspended in water. It occurs as a dark-brown powder, soluble in benzene, chloroform and hot alcohol, but insoluble in water. It is employed by Unna like chrysarobin, in 5- to 10-per-cent. ointments; it is considered milder in action than chrysarobin.

CHRYSAROBIN TETRA-ACETATE. See *lenirobin*.

CHRYSAROBIN TRIACETATE. See *eurobin*.

CHRYSOFORM, or *dibromo-diiodo-hexamethylenetetramine*, occurs as a fine, yellow powder, of a faint iodine odor, insoluble in the ordinary solvents. It is used in France as a wound antiseptic. See caution under *formaldehyde*.

CHRYSOLEIN is the name of a French preparation of sodium fluoride used as an antiseptic.

CHRYSYL is the trade name adopted for *zinc boro-picrate*, a yellow powder employed as an antiseptic and astringent in eye and skin diseases.

CHYMOGEN is a milk-curdling agent, probably rennin, made by Armour & Co., Chicago, Ill.

CIBA is a German brand name for *carbonated creosote*.

CICUTINE HYDROBROMIDE is a synonym of *contine hydrobromide*.

CIDRASE (Couturieux) is a prepared cider yeast occurring as a brownish powder of an apple odor and faintly acidulous taste. Besides the ingredients common to beer or wine yeast (such as zymase, glycogen, nuclein, etc.), this cider yeast is said to contain a therapeutically active oxydase, to which it owes its reputed curative power in gouty and rheumatic conditions. It is administered in doses of 0.5 gram, four to six times daily, before meals; either as powders taken with sweetened water, or in the form of tablets.

CINCHONINE IODOSULPHATE, also known as *antiseptol*, *iodized cinchonine sulphate*, and *cinchonine herapathite*, occurs as a light, reddish-brown powder, containing 50 per cent. of iodine, soluble in alcohol or chloroform but insoluble in water. It has been recommended as a substitute for iodoform internally as well as externally. Dose, 1 to 5 grains.—Mfr.: E. Merck, Darmstadt, and others.

CINCHONINE SULPHOCARBOLATE and CINCHONINE SULPHOCRESOTATE have been introduced as antipyretics, antiseptics, and antiperiodics. Nothing further seems to be known about them.

CINEOL is a synonym of the official *eucalyptol*.

CINEOL ARSENATE is a very recent arsenical preparation combining the alterative properties of arsenic with the antiseptic virtues of eucalyptol (cineol). Dose-statements are wanting.

CINEROL is a thin mercurial cream consisting of 4 grams of metallic mercury, and 20 c.c. each of sterilized palm oil and sterilized sesame oil. It is used by intramuscular injection as an antisyphilitic.

CINNAFORM TABLETS supposedly contain "a compound of cinnamon [?—Ed.] and formaldehyde," probably a combination or condensation product of cinnamic acid and formaldehyde. They are used in colds, influenza, etc.—Mfrs.: A. H. Cox & Co., Brighton, Eng.

CINNAMINE is not derived from cinnamon oil or from cinnamic acid, but is a tonic mixture, the exact composition of which is not divulged.

CINNAMYL-EUGENOL (*eugenol cinnamic ester*), $C_6H_5 \cdot C_5H_7 \cdot O \cdot CH_2 \cdot OCO \cdot (CH)_2 \cdot C_6H_5$, forms colorless crystals, very slightly soluble in water, more freely so in alcohol, ether or chloroform. It is employed chiefly in phthisis. Dose, 5 to 10 grains several times daily.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CINNAMYL-META-CRESOL.—See *hetocresol*.

CINNAMYL-QUININE HYDROCHLORIDE is the salt of the cinnamic ester of quinine, and is intended as an an-

tipyretic and antiperiodic. No further data appear to be extant.

CIRRHOLYSIN is the name applied to triturates of allylsulphocarbamide (thiosinamine)-bismuth triiodide, each containing 1/10 grain of the remedy and 9/10 grain of milk sugar. The article is used chiefly in ankylosis of the joints. Dose, 10 to 20 triturates during the day, with meals.—Mfrs.: Anglo-American Pharmaceutical Co.; agts.: E. Fougere & Co., New York.

CISTA is, according to Dr. Aufrecht, essentially a hemoglobin preparation containing sugar and aromatic tinctures; a reddish-brown liquid of pleasant, aromatic odor and sweet, aromatic taste.—Mfr.: C. Lahr, Würzburg, Germany.

CITARIN, chemically *sodium anhydromethylenecitrate*, $\text{Na}_2\text{C}_6\text{H}_6\text{O}_7$, is a white, slightly hygroscopic powder, of saline and acidulous taste; soluble in about $1\frac{1}{2}$ parts of water, but insoluble in alcohol or ether. It has been recommended as a solvent of uric acid deposits in gouty conditions, as well as a remedy in chronic rheumatism. It liberates formaldehyde in the blood, and this is said to form very soluble combinations with the uric acid present in the system and thus favor its elimination; but this entails a serious risk as the formaldehyde may be converted in the system to formic acid, and it has been suggested that the deadly and sight-destroying power of wood alcohol is due to its decomposition in the system into formic acid. See further under *formaldehyde*. Dose, 15 to 30 grains, with a copious draught of water.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

CITON TABLETS, *white*, contain 0.1 gram of phenolphthalein, 0.5 gram of sugar and 0.01 gram of menthol. The *brown* consist of 0.1 gram of phenolphthalein, 0.5 gram of sugar, 0.002 gram of vanillin and 0.1 gram of cacao. They are taken as laxatives. Dose, 1 to 5.—Mfr.: G. Stambach, Colmar, Germany.

CITRAMIN-OXYPHEN is a trade name for *hexamethylenetetramine methyl-citrate*, better known as *helmitol*. See caution under *formaldehyde*.

CITRAMINE OXYPHENYLATE (perhaps identical with "citramin-oxyphen," according to Zernik, is a mixture of equal parts of hetralin (hexamethylenetetramine-resorcin) and helmitol (hexamethylenetetramine methylene-citrate). Dose, 8 to 20 grains. See caution under *formaldehyde*.

CITRIC-ACID TRIPARAPHENETIDIN is *citrophen*.

CITROCOLL is defined as the *neutral citrate of amidopara-phenetidin* (amidophenacetin). It is a crystalline substance; melting point 193°C .; readily soluble in water. It is employed as an antipyretic, antirheumatic and analgesic. Dose, 10 to 20 grains; up to 90 grains per day.—Mfr.: Chem. Fabrik "Falkenberg," Falkenberg-Grünau, Germany.

CITRONAL PILLS contain per 100, according to the manufacturer, 0.5 gram of quinine hydrochloride, 4 grams of extract of huckleberry leaves, 10 grams of citric acid, 6 grams of buckthorn extract, and powdered liquorice and liquorice extract q. s. They are used in gout, rheumatism, etc. Dose, 5 pills thrice daily.—Mfr.: R. Schoellkopf, Munich, Germany.

CITRO-PARAPHENETIDIN is the chemical designation for *apolysin*; *neutral citro-phenetidin* the chemical equivalent of *citrophen*.

CITROPHEN, or *neutral citro-phenetidin*, *paraphenetidin citrate*, or *citric-acid triparaphenetidin* ($C_6H_5.OC_2H_5.NH.CO$)₃.C₃H₄.OH, occurs as a white, crystalline powder, of tart taste, and soluble in 40 parts of water. It was introduced as a succedaneum for phenacetin in all its uses. Dose, 8 to 15 grains; maximum daily dose, 90 grains. Mineral acids decompose it.—Mfr.: Dr. I. Ross, Frankfort-on-M., Germany.

CITROQUINUM is a French compound of the citrates of iron, quinine and caffeine.—Mfr.: G. Simmonet, Paris, France.

CITRORHEUMIN TABLETS contain in each package of 25, citarin 10 grams, colchicine 0.01 gram, quinine sulphate 1 gram and citric acid 5 grams. They are used in gout and rheumatism.—Mfr.: W. F. Weiss, Munich, Germany.

CITROSIDINE is the name applied to tablets said to contain 0.25 gram of trisodium citrate, and put forward for use in gastralgia, vomiting and hyperacidity.—Mfr.: G. Gremy, Paris, France.

CITROVANILLE is an antineuralgic preparation containing iso-pyramidon citrate as its active component.—Mfr.: R. Otto, Frankfort-on-M., Germany.

CITROZON is described as a mixture containing in 100 parts 30 of effervescing soda powder and 1/200 vanadic acid, together with sodium chloride and sodium citrate. It is said to stimulate metabolism. Dose, a teaspoonful 6 to 8 times daily.—Mfr.: A. Kruchen, Cologne, Germany.

CITRUREA is the trade name applied to tablets consisting of urea, citric acid and lithium bromide.—Mfr.: Apotheker Radlauer, Berlin, Germany.

CITTOSOL is an ichthyol emulsion not completely described.

CLAVIN is a proximate principle of ergot which has been isolated by Prof. Ernst Vahlen, of the University of Halle, Germany. The formula, C₁₁H₂₂N₂O₄, has been assigned to it, and it occurs as a microcrystalline substance soluble in two parts of water, insoluble in absolute alcohol, ether or benzin. It does not form salts. According to the discoverer, clavin represents the full oxytocic virtue of ergot, causing no irritation when injected hypodermically,

keeps for a long time in the dry state, and its solutions can be boiled without decomposition setting in. Its aqueous solutions, however, on keeping in a warm place for any length of time, develop a fungous growth. It is marketed also as *clavin-salt tablets*, each containing 0.02 gram of clavin and 0.08 gram of sodium chloride, and intended specially for subcutaneous use dissolved in 1 c.c. of water; and as *clavin-sugar tablets*, each carrying 0.02 gram of clavin and intended for use by the mouth. Dose, $\frac{1}{8}$ to 1 grain.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CLORAN (*chloral-acetone chloroform*) is defined as a condensation product of chloral hydrate and acetone chloroform (chloreton), and occurs as white crystals of non-pronounced camphoraceous taste, easily soluble in diluted alcohol and soluble in 100 parts of water; sulphuric acid decomposes it into its components. It is advertised as hypnotic. Dose, 8 to 20 grains.

COCAINE-ALUMINIUM CITRATE is described as a compound of 3 molecules of aluminium citrate and 1 molecule of cocaine alkaloid; difficultly soluble in water, and acting first as an astringent then as an anesthetic. Further data are wanting.—Mfr.: J. D. Riedel Co., Berlin (Germany) and New York.

COCAINE PHENATE (*phenylate, carbolate*) as marketed by Merck is believed to be a definite compound having the formula $C_{17}H_{21}NO_4 \cdot C_6H_5O$. It is obtained by dissolving 76 parts of cocaine alkaloid in 24 parts of melted phenol crystals, and occurs as a yellowish, soft mass which is soluble in alcohol and in ether, but almost insoluble in water. It is employed mainly as a local anesthetic in dentistry and in laryngeal tuberculosis, but is occasionally given internally in gastric pain. Dose, $\frac{1}{12}$ to $\frac{1}{4}$ grain in capsules. *Cocaine phenate Poinso* is a solution of 1 part of phenol and 2 parts of cocaine alkaloid in a mixture of 40 parts of liquid petrolatum and peanut oil. It is marketed in 1-gram tubes. *Cocaine phenate Viau* is a mixture of cocaine hydrochloride with carbolic acid.

COCAINOL does not contain cocaine, as its name would seem to imply, but anesthesin (see this). It is marketed as "drops," "lanolin," "dusting-powder," etc.—Mfrs.: Chem. Institute, Berlin SW., Germany.

COCAPYRINE is said to be a mixture of 1 part of cocaine hydrochloride and 99 parts of antipyrin, which is marketed in 3-grain pastilles intended for use in throat affections.

CODEINE METHYL-BROMIDE (*brom-methylate*). See *eucodine*.

CODEINE ORTHOGUAIACOLSULPHONATE. See *guaiacodine*.

CODESOL is a syrup containing 2 per cent. of guaiacol and 0.2 per cent. of codeine, and employed in coughs and

other respiratory diseases. Dose, 1 to 2 teaspoonsfuls.—Mfr.: C. Hermann, Basle, Switzerland.

CODRENINE is a solution of cocaine hydrochloride and adrenalin, each c.c. of which contains 0.02 gram of the former and 0.0006 gram of adrenalin hydrochloride. It is employed as a local anesthetic and styptic, chiefly in dentistry. In small operations 8 minims are injected undiluted; where larger areas are to be anesthetized it is usually used diluted with 9 volumes of physiological salt solution.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

COELIACIN is, according to Dr. Schwerdt, the dried mesenteric glands of sheep, marketed in tablets, each of which represents 0.3 gram of fresh gland. It is intended for use particularly in scleroderma.—Mfr.: Apotheker Bormann, Gotha, Germany.

CERUSANTAL CAPSULES contain pepsin, methylene blue, calol, oil of sandalwood and oil of peppermint. They are used in gonorrhea.—Mfr.: Apotheker Lothar Cohn, Leignitz, Germany.

COJELLA is described as "a palatable jelly containing 93 per cent. of pure castor oil." It is offered as a succedaneum for the oil as a laxative for children and others.—Mfrs.: Zymole Co., New York City.

COLAETINA is the collective name given to lanolin-cachoucou plasters made by H. Turinsky, Vienna, Austria.

COLALIN consists essentially of hyoglycocholic and hyotaurocholic acids, obtained from bile. To preserve the pulverulent condition a little magnesium carbonate is added. It occurs as a yellow powder of faint odor and persistent bitter taste, and is only slightly soluble in water. It is exploited as an active cholagogue and laxative. Dose, $\frac{1}{4}$ to $\frac{1}{2}$ grain three or four times daily. Marketed in powder form and as tablets ($\frac{1}{8}$, $\frac{1}{4}$ and $\frac{1}{2}$ grain).—Mfrs.: Rufus Crowell & Co., Somerville, Mass.; agts.: Schieffelin & Co., New York.

COLALINE LAXATIVE is said to be a coal-tar product. It should not be confounded with "colalin," described above.—Mfrs.: F. Morson & Son, London W. C., England.

COLCHICINE SALICYLATE is not a true salt of colchicine, as this principle is not known to combine with organic acids, but rather a mixture containing 20 parts of colchicine to 7 parts of salicylic acid; a yellowish powder, soluble in water, alcohol, or ether. It has been employed by Thompson and Tobias in gout and rheumatism. Dose, 1/100 to 1/60 grain every four hours.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

COLCHISAL is the name applied to capsules "each of which contains $\frac{1}{4}$ milligram of colchicine, $\frac{1}{8}$ milligram of the active principle of cannabis indica, and 20 centigrams of methyl salicylate." The article is used as an antirheumatic and antipodagric. Dose, 1 to 4 capsules several times daily.—Mfrs.: E. Fougere & Co., New York.

COLEY'S FLUID is a mixture of erysipelas and prodigious toxines, recommended by Dr. M. B. Coley for the treatment of malignant neoplasms, particularly sarcoma. It is injected into the tumor itself or hypodermically, in doses of $\frac{1}{2}$ to 2 minims or more (sufficient to produce appropriate reaction).—Mfrs.: Parke, Davis & Co., Detroit, Mich.

COLLA TANNICA (*tannated gelatin*) is a Swiss substitute for *tanacol*, an intestinal astringent.

COLLAFORM is a pulverulent compound of formaldehyde and gelatin, analogous to glutol and used as a vulnerary. See caution under *formaldehyde*.—Mfr.: C. Fr. Hausmann, St. Galen, Switzerland.

COLLARGOL (*colloidal silver* or *soluble silver*; *argentum Crédé*) is an allotropic form of metallic silver, said to contain 85.87 per cent. of silver and a small percentage of albumin with products of its oxidation. It occurs as small, hard, brittle, bluish-black, scale-like pieces, that are soluble in about 20 parts of distilled water, yielding a dark olive-brown solution which keeps for several months without especial protection from light or heat. Though used to a small extent in certain skin, surgical and eye diseases, and infectious gastrointestinal disturbances, its chief employment is intravenously in the treatment of septicemia and pyemia; 1 to 2 grains in 2 to 5-per cent. solution every 12 to 24 hours. Topically it is used mostly as "unguentum Crédé" (see this); per os, in solution or tablets, $\frac{1}{2}$ to 2 grains twice daily; by enema, 10 to 30 grains in 4 ounces of boiled warm water. To prepare collargol solutions put the drug into a perfectly clean brown bottle, add the necessary amount of distilled water, and allow to stand until softened; then shake vigorously until complete solution is effected. It need not be filtered. It should have a clear brown color; if gray and turbid, it is decomposed. A very warm temperature is apt to decompose it.—Mfrs.: Chem. Fabrik von Heyden, Radebeul, near Dresden; agts.: Schering & Glatz, New York.

COLLAURIN (*colloidal gold*) is obtained by the reduction of gold chloride solution by means of formaldehyde and subsequent dialysis. Its aqueous solution has a ruby-red color which is changed to blue by acids, the gold precipitating. It is used internally in cancer, syphilis and scrofulous diseases. Dose, $\frac{1}{2}$ to 1 grain, three times a day.—Mfrs.: Chem. Fabrik Von Heyden, Radebeul, near Dresden, Germany; agts.: Schering & Glatz, New York.

COLLEMPASTRA are plasters having a rubber base.—Made by Chem. Fabrik "Helfenberg," Helfenberg, Germany; agts.: C. Reinschild Co., New York.

COLLIGAMEN is a collective term applied to medicated adhesive bandages introduced by E. Dieterich. Mull bandages are coated on the one side with different glue-glycerin

solutions. For use, the bandages are quickly immersed in cold water, applied with the adhesive surface upon the part to be dressed, and covered with cotton or an ordinary bandage. They are employed in place of Unna's glue dressings.—Mfr.: Same as preceding.

COLLOSIN, *acetone-collodion*, or *filmogen*, is described under the last-named heading.

COLLOXYLIN is a synonym of *pyroxylin* (soluble gun-cotton).

COMAIN is obtained "by the action of camphor and iodoform on sesame oil; camphor mono- and diiodide are formed, and enter into combination with the fatty acids of the oil." It is intended for use chiefly in tuberculosis.—Mfr.: J. Wettenstein.

CONDUROL is a French preparation of *condurango*, exploited as a remedy in gastralgia, etc.

CONEPHRIN is a solution of cocaine with *paranephrin*, employed as a local anesthetic and vasoconstrictor.—Mfrs.: Dr. Thilo & Co., Mayence, Germany.

CONIFEROL TABLETS represent, according to the manufacturers, solid extract of pine needles, and are intended for use in preparing antiseptic and stimulating baths—"pine needle baths."—Mfrs.: Emil Langbein & Co., Mellenbach, Germany.

CONIINE HYDROBROMIDE (*cicutine* or *conicine hydrobromide*), $C_8H_{12}N.HBr$, occurs as white needles or powder, soluble in 2 parts of water and in 3 parts of alcohol and soluble also in chloroform, but insoluble in ether. It contains 61 per cent. coniine alkaloid. It is employed as an antispasmodic and antineuralgic, chiefly in traumatic tetanus, sciatica and whooping-cough. Dose (per os) 1/60 to 1/30 grain three or four times daily; children, 1/600 to 1/60 grain. Hypodermically (in tetanus) as much as 1/20 to 1/6 grain has been injected at a time. The antidotal treatment generally consists in giving tannin, then emetics, enemas of vinegar, strychnine or atropine hypodermically, etc.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CONTRATUSSIN is a compound fluid extract of chestnut leaves and garden thyme, exploited as a whooping-cough remedy.—Mfr.: Hofapotheke, Dresden, Germany.

CONTRATUSSIN BAYER is a compound elixir of thyme and sodium bromide, used in whooping-cough and bronchial catarrh.—Mfr.: Antol Bayer, Budapest, Hungary.

CONVACOCTA (Bahr) are aqueous plant extracts or concentrated infusions evaporated in a vacuum to the weight of the drug used in their preparation, and are intended to be used in the place of infusions or decoctions made in the usual way.—Mfr.: George Bahr, Wetzlar, Germany.

CONVALLAMARIN, $C_{25}H_{44}O_{12}$, is a glucoside from *convallaria majalis*, occurring as an amorphous, yellowish powder, soluble in water or alcohol. It is used as a cardiac stimulant and a diuretic. Dose, $\frac{3}{4}$ to 1 grain, three to six times daily; hypodermically, $\frac{1}{12}$ to $\frac{1}{3}$ grain. Maximum dose, 1 grain single, 5 grains daily. Antidotal measures: Emetics, stomach pump, camphor, wine, etc.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CONVULSIN is a sweetened, flavored fluid extract of eucalyptus for use in coughs, asthma, etc. Dose, a table-spoonful.—Mfr.: E. B. Kowalewski, Berlin O, Germany.

COPPER ARSENITE several years ago came to the fore as a remedy in cholera infantum and other infectious diarrheas; $\frac{1}{120}$ grain is administered in water every half hour until relieved, then half hourly. It is also prescribed occasionally in dysmenorrhea and in whooping-cough. Maximum dose, 1 grain.—(Nonproprietary.)

COPPER CITRATE (*cupric citrate*), like the preceding, is not a new introduction, but has only in recent years been employed therapeutically as a substitute for copper sulphate, mainly in trachoma. It is also known as *cupri-citrol*. It forms a green or bluish-green, odorless powder containing 34 to 36 per cent. of copper; very slightly soluble in water. It is prescribed as 5- to 20-per-cent. dusting powders, pencils or ointments.—(Nonproprietary.)

COPPER CYANIDE, a light, whitish powder almost insoluble in water or alcohol but soluble in ammonia water or solution of potassium cyanide, was introduced by the famous ophthalmologist Galezowski as a remedy in the treatment of trachoma.—(Nonproprietary.)

COPPER METHYLENE-DISALICYLATE.—See *cu-formasal*.

COPPER NUCLEINATE or **NUCLEIDE**.—See *cuprol*.

COPPER SULPHOCARBOLATE (*para-phenol-sulphonate*), also known as *cupriaseptol*, $Cu(C_6H_4SO_3)_2 + 6H_2O$, occurs as green crystals, soluble in water or alcohol. Gawalowski recommends it as an astringent antiseptic. It is used mainly in $\frac{1}{4}$ - to 1-per-cent. solutions.—(Nonproprietary.)

COPRA OIL, a suppository base, is probably coconut oil from which the constituents with low melting-points have been removed.

COR is the collective name for compresses to be applied over the heart and nerves, upon the forehead, neck or abdomen, which, when immersed in water and then applied, generate carbon dioxide and thus produce the local effects of the latter.—Mfrs.: Schindler & Löwenstein, Berlin W, Germany.

CORDOL or *tribromsalol*, $C_6H_4.OH.COOC_6H_4Br_3$, is an intestinal antiseptic and antirheumatic that occurs as a

crystalline powder insoluble in water and only slightly soluble in alcohol or ether. Dose, 8 to 20 grains three or four times daily.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CORDYL is *acetylated cordol*, of no therapeutic importance.

CORIAMYRTIN, $C_{30}H_{50}O_{10}$, is a bitter principle obtained from the leaves and fruit of *coriaria myrtifolia*. It forms colorless crystals, soluble in water, alcohol, chloroform or ether, and is used in conditions of collapse, particularly those due to weakening of the respiratory and vascular centers. Dose, 1/120 to 1/60 grain, subcutaneously.

CORISOL is a semi-solid oleaginous preparation of the active principle of the suprarenal capsule, used mainly in eustachian and post-nasal catarrh. *Corisol Inhalant* is an oily solution of the same active principle, for use with an atomizer.—Mfrs.: Squire & Sons, London W, Eng.

CORNESIN, extolled for use in eye diseases, is stated to be simply cod liver oil or seal oil.—Mfr.: Adolph Bieler, Germany.

CORNIL is a meat juice marketed by a German firm.

CORNUTIN CONCENTRATED is described as a nearly pure solution of the alkaloids contained in ergot.—Mfr.: Fr. Schaefer, Andernach, Germany.

CORNUTINE CITRATE is the salt of an alkaloid of ergot, which, according to Kobert, is the active contractile principle of the crude drug, but, according to Tanret, is a more or less decomposed ergotinine. It is prescribed as an oxytocic and hemostatic in obstetric practice, but latterly more often in spermatorrhea. It occurs as a brownish-black, very hygroscopic powder, soluble in alcohol, sparingly and incompletely soluble in water. Dose, in hemorrhage, 1/20 to 1/4 grain; in spermatorrhea, 1/20 grain twice daily, in pills. Maximum daily dose, 1/3 grain.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CORNUTOL is "a concentrated, permanent, non-irritating, non-nauseating and aseptic preparation of ergot, especially prepared for hypodermic and general use. Each minim represents 2½ grains of Spanish ergot." Dose, 5 to 30 minims.—Mfrs.: H. K. Mulford Co., Philadelphia, Pa.

CORONA is a dental local anesthetic, said to contain cocaine, and a heterogeneous assortment of various other drugs.—Mfr.: C. A. Lorenz, Leipsic, Germany.

CORONILLIN is a glucoside contained in the seeds of *coronilla scorpioides*; a yellow powder, soluble in water or alcohol, and employed as a heart-tonic and diuretic analogous in action to digitalin. Dose, 1 to 2 grains four times daily. Used also hypodermically. Maximum daily

dose, 10 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

COROSANA is a cod liver oil "preparation," in the form of sticks which are said to contain in addition to the oil, chocolate, lecithin, phosphoric acid and calcium phosphate.

COROSUCCIN is a new antiseptic, consisting, according to A. Bebesch and F. Begnesco, of equal parts of a 1½ per cent. solution of succinic acid and 1:10,000 solution of corrosive sublimate. The succinic acid is said vastly to increase the bactericidal action of the sublimate.

CORPUS LUTEUM EXTRACT is used in disturbances attending the menopause and in dysmenorrhea. Dose, ½ to 1 grain, gradually increased to 2 grains, thrice daily.—(Nonproprietary.)

CORROSOL is a solution of mercury succinate, mercury cacodylate and novocain or eucaine, marketed into ampuls containing 2 c.c. each, which quantity represents 0.0075 gram of metallic mercury (equivalent to 0.001 gram mercuric chloride). It is employed hypodermically in syphilis.

CORTICIN is a new trade name for the quinine and caffeine compound heretofore known only as *basicin*. See the latter title.

CORYFIN is defined as the *ethylglycolic ester of menthol or menthyl ethylglycolate*, $C_{14}H_{26}O_3$. It occurs as a limpid, colorless oil having a faint menthol odor. It is soluble in alcohol, ether or chloroform; sparingly soluble in water. It is employed as a succedaneum for menthol in nervous headache, coryza, hoarseness and pharyngeal irritation. In headache it may be lightly rubbed in or painted on the forehead, avoiding the eyes; in coryza it may be applied with a brush or a spray; in throat affections 3 or 4 drops may be placed on a lump of sugar and allowed to dissolve in the mouth, or mixed with warm water and used as a gargle.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

CORYL is a solution of methyl chloride in ethyl chloride, analogous to *anesthol* or *anestile*.

CORYLOFORM is a local and general anesthetic consisting of a mixture of ethyl chloride, methyl chloride and ethyl bromide.—Mfrs.: Pharmacie Centrale de France, Paris.

COSAPRIN (*sodium acetyl-sulphanilate*), $C_6H_4.NH(CO.CH_3)SO_3Na$, which was introduced a few years ago as an innocuous substitute for antifebrin, which could be employed also hypodermically, occurs as a white, hygroscopic, crystalline substance, freely soluble in water, less readily so in alcohol, and almost insoluble in ether. Dose, 10 to 30 grains. Little has been heard of it since its introduction.—Mfrs.: Hoffmann-LaRoche Chem. Works, Basle (Switzerland) and New York.

COTARGENT is a brand name for *colloidal silver*, an article described under *collargol*.

COTARGIT is a double salt of cotarnine hydrochloride (stypticin) and ferric chloride; ruby-red crystals, freely soluble in water and intended for use as a styptic.—Mfr.: Dr. A. Voswinkel, Berlin W., Germany.

COTARNINE HYDROCHLORIDE is the chemical name of the article known in the trade as *stypticin*; see the latter heading.

COTARNINE PHTALATE is the chemical designation of the hemostatic marketed as *styptol*, which see.

COTOIN is the active principle of true coto bark; a yellow powder of pungent taste, and soluble in alcohol, ether, or chloroform, but very slightly so in water. It is used some to arrest night-sweats, but chiefly as an anti-diarrheal in dysentery, etc. Dose, $1\frac{1}{2}$ to 3 grains, in wafers; maximum dose, 5 grains single, 15 grains per day. Contraindicated when there is tendency to intestinal hemorrhage.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CREALBIN or *creolalbin* is a compound of creolin and albumin intended as a form for administering creolin internally. It is a brown powder, representing 50 per cent. of creolin, and used as an intestinal disinfectant and astringent in doses of 5 to 15 grains.

CRELIUM is a cresol-soap solution something like the official solution cresol compound.

CREME DEHNE is said to consist of witchhazel extract, boric acid, anesthesin, wool fat and camphor, with essence of heliotrope and essence of rosemary.

CREMOBISMUTH is a *milk of bismuth* each fluidounce of which "represents the equivalent of about 40 grains of bismuth subnitrate in the form of hydrated or basic carbonate of bismuth." It is employed as a gastro-intestinal protective and astringent. Dose, teaspoonful to tablespoonful every two or three hours.—Mfrs.: H. K. Mulford Co., Philadelphia, Pa.

CREOFORM or *kreoform* or *creosoform* or *kresoform* is a condensation product of creosote and formaldehyde; a greenish-yellow, odorless, tasteless powder, becoming light-yellow on exposure to air; insoluble in water or ether, slightly soluble in alcohol, and readily soluble in a mixture of alcohol and chloroform and in alkaline solutions. It is intended to replace creosote in tuberculosis and diarrheas. See caution under *formaldehyde*. —Mfr.: G. F. Henning, Berlin, SW, Germany.

CREOLALBIN.—See *crealbin*.

CREOLIN PEARSON is defined as "saponified coal-tar creosote, composed of homologues of carbolic acid, water, hydrocarbons, organic bases, soda, resin, sulphur and chlo-

rine." It occurs as a dark-brown, thick liquid of tarry odor and specific gravity 1.040 to 1.080. Soluble in about 40 parts of water, making a milky emulsion, and soluble in all proportions in alcohol, ether or chloroform. It is used as a germicide, disinfectant and deodorant, chiefly in $\frac{1}{2}$ to 2 per cent. solutions, but also in 2 to 5 per cent. ointments (in parasitic skin diseases). Dose, internally 2 to 5 minims in pills, three times daily; in cholera 15 minims more frequently. Its aqueous solutions should be prepared freshly as wanted.—Mfrs.: Wm. Pearson & Co., Hamburg; agts.: Merck & Co., New York.

CREOSAL or *tannosal* is a combination of creosote and tannin. It occurs as a brown, hygroscopic powder, readily soluble in water, alcohol or glycerin, and containing 60 per cent. of creosote. It is used as a substitute for creosote in tuberculosis, also as an intestinal astringent (especially in phthisical diarrhea). Dose, 10 to 30 grains. Marketed as 6.6 per cent. solution and as 5-grain pills.—E. Feigel, Mühlhausen, Germany.

CREOSALGEN is a new disinfectant, the composition of which is not known.

CREOSAPOL is a disinfectant analogous to compound solution of cresol.—Mfr.: Chem. Fabrik List, Hanover, Germany.

CREOSIN is a yellow liquid said to contain creosote, iodine, calcium hypophosphite, and balsam of peru as the therapeutically active components; it is used in phthisis.

CREOSOCAMPHOR.—See *creosote camphorate*.

CREOSOFORM or *kreosoform* is the same as *creoform*.

CREOSOLID or *kreosolid* is the magnesium compound of the bivalent phenols of creosote, and forms a white powder of slight odor and taste. One part represents 2 parts of creosote. It is usually given in doses of 8 grains four times daily as a substitute for creosote or guaiacol.—Mfr.: Dr. Denzel, Tübingen, Germany.

CREOSOTAL.—See *creosote carbonate*.

CREOSOTAL-ICHTHYOL is described as a mixture of 15 parts each of creosotal and ichthyol, 30 parts of glycerin and 10 parts of peppermint water. It is offered as an antitubercular. Dose, 20 to 40 drops three times daily, in wine or lemonade.

CREOSOTE CAMPHORATE is a compound of equal molecules of creosote and camphor, which is used chiefly as a sedative. Dose, 3 grains three or four times daily, in capsules (so marketed).

CREOSOTE CARBONATE, so-called, but which should be designated carbonated creosote, is a mixture of carbonic acid esters prepared from creosote. It is better known as *creosotal*. It occurs as a yellow, viscid, clear, oily liquid, of faint odor and slightly bitter taste; insoluble in water, but soluble in alcohol, ether, chloroform and oils. It con-

tains about 92 per cent. of creosote. It is incompatible with alkalis. It is used for the same purposes as creosote. Dose, 5 to 30 grains three times a day, in milk, wine, cod-liver oil, etc. Externally it may be applied undiluted.

CREOSOTE-MAGNESOL is a powder said to represent 80 per cent. of creosote, calcined magnesia being the vehicle. It is offered as a substitute for liquid creosote, which is free from the burning taste of and the gastric irritation produced by the latter. It is generally administered in pill form.

CREOSOTE PHOSPHATE, so-called, is referred to under *phosote*, and CREOSOTE PHOSPHITE under the heading *phosphotal*.

CREOSOTE TANNATE, so-called, is described under *creosal* and CREOSOTE TANNOPHOSPHATE, so-called, under *taphosote*.

CREOSOTE VALERIANATE, so-called, is better known as *eosote* and will be described under that heading.

CREOSOTIDE is said to be a combination of creosote and iodine. It is used chiefly in tuberculosis, scrofula, enlarged glands, etc. It forms a brownish powder of weak creosote odor and taste and insoluble in water; iodine content, 25 per cent. Dose, $\frac{1}{4}$ to 1 grain with meals. It is marketed only as $\frac{1}{4}$ and $\frac{1}{2}$ -grain sugar-coated tablets and as compound tablets.

CREOSOTINE is a palatable preparation of beechwood creosote containing 1 minim of this drug in each fluid dram. Dose, a teaspoonful to a tablespoonful or more three times a day.—Mfrs.: Penn. Pharm. Co., Philadelphia, Pa.

CRESALBIN (*kresalbin*) is a compound of creosote and albumin, offered as a succedaneum for liquid creosote as an antitubercular and antizymotic. It should not be confounded with *crealbin*, a combination of creolin with albumin.

CREBALOL (*kresalol*; *resol salicylate*; *metacresyl salicylate*), $C_6H_4.CH_2.OOC.C_6H_4.OH$, is prepared from sodium metacresylate and sodium salicylate with the aid of phosphorus oxychloride. It occurs as colorless, odorless and almost tasteless crystals soluble in alcohol or ether, but insoluble in water; melting point, 73° to 74° C. It is used as an intestinal antiseptic and antirheumatic like salol. Dose, 5 to 15 grains several times daily.

CRESEGOL is *mercury ortho-nitro-cresol-parasulphonate*; a brownish-red, readily soluble powder intended for use as a surgical disinfectant.

CRESOGENT is described as a non-poisonous disinfectant and deodorant for general disinfection.—Mfrs.: Blumauer-Frank Drug Co., Portland, Ore.

CRESOL FLORICINATE is a brown, alkaline, viscous liquid, containing 50 per cent. of cresol, with water and

floricin (a derivative of castor oil). It is used as an antiseptic and disinfectant, similarly to our official compound solution of cresol. A greater strength (66 per cent. cresol) of the same preparation has also been introduced, colored green to distinguish it from the weaker article.

CRESOL IODIDE (*ortho-cresol iodide*) will be described under *traumatol*.

CRESOL SALICYLATE. See *cresalol*.

CRESOLIN is a mixture of cresol with resin soap, and is hence chemically between creolin and lysol. It is employed as a disinfectant.

CRESYLOL is identical with *cresol* (official).

CRESYLONE is a liquid disinfectant containing 50 per cent. of cresylic acid (cresol), making a clear solution with water in proportions. It is used chiefly as a surgical antiseptic and deodorant.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

CROTALIN is a dried and powdered venom of the rattlesnake, employed by injection in pulmonary tuberculosis, asthma, pain of nervous origin, etc., in the dose of 1/100 grain dissolved in water and glycerin.

CRURIN is the trade name for *quinoline-bismuth sulphocyanide* (rhodanide), of the formula $(C_6H_5N.HSCN)_2 \cdot Bi(SCN)_3$. The drug occurs as a reddish-yellow, stable powder of non-pronounced quinoline odor; insoluble in water, alcohol or ether. It is prescribed as a siccativ antiseptic, chiefly in ulcers of the leg, in 20- to 50-per-cent. dusting-powders; in 0.5-per-cent. suspension in water with a little glycerin it is occasionally employed in gonorrhea. Marketed also as a 50-per-cent. dusting-powder, with starch.—Mfrs.: Kalle & Co., Biebrich-on-Rh., Germany; agts.: Lehn & Fink, New York.

CRYOGENINE or *kryogenin*, chemically *metabenzamino-semicarbazide*, occurs as white, odorless, bitterish powder soluble in alcohol, chloroform, or ether and in about 40 parts of water. It has been recommended by several French physicians, in doses of 5 to 15 grains, as an antipyretic in phthisis and typhoid fever.—Mfr.: A. Lumiere, Paris, France; agts.: Fougere & Co., New York.

CRYSOL is a product analogous to the official solution cresol compound.

CRYSTALLINE or *kristallin* is a protective similar to collodion. It is said to consist of pyroxylin (1), methyl alcohol (4), and amyl acetate (15). A flexible modification is obtained by adding castor oil (5) and balsam of fir (10). The same name has been given to a liquid resembling listerine. Methyl alcohol should be avoided in external as well as internal preparations, as it possesses deadly and sight-destroying power. See *formaldehyde*.—Mfr.: W. Martindale, London, Eng.

CRYSTALLOSE is a brand of crystalline, soluble saccharin (sodium-benzoylsulphonicimide).—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

CRYSTOS figures as an ingredient of popular prescriptions "for making an eye remedy." It is a coarse, white, odorless powder, soluble in water without appreciable residue. According to analyses made at the chemical laboratory of the American Medical Association, the composition of crystos is about as follows: dried sodium borate 20 per cent., sodium chloride 20 per cent., and boric acid 60 per cent.—Mfrs.: H. S. Peterson & Co., Chicago, Ill.

CUFORMASAL is the copper salt of formasal (methylene-disalicylic acid), occasionally prescribed in ulcerative diarrhea and venereal ulcers or gonorrhea. Dose, 3 to 6 grains. See caution under *formaldehyde*.—Mfrs.: Organic Chem. Co., Philadelphia, Pa.

CUPRAGOL is a compound of protein and copper, intended for use as an astringent and germicide.

CUPRATIN is a copper-albumin compound containing 6.4 per cent. copper and claimed to be a non-toxic alterative and nervine; a brown, pulverizable mass, insoluble in water. Dose, not stated, but probably $\frac{1}{2}$ to 1 grain thrice daily.

CUPRIASEPTOL is what Dr. Gawalowski called *copper sulphocarbolate* (phenolsulphonate); see this.

CUPRICIN.—See *copper cyanide*.

CUPRICITROL is a fanciful name applied to *copper citrate*, under which heading it is here described.

CUPROHEMOL or *cuprated hemol* is hemol with 2 per cent. of copper organically combined. It occurs as a dark-brown, insoluble powder, and is used in place of the older copper compounds in tuberculosis, scrofula, etc. Dose, $1\frac{1}{2}$ to 3 grains thrice daily. Maximum dose, 8 grains.—Mfr.: E. Merck, Darmstadt, Germany; Merck & Co., New York.

CUPROL (*copper nucleinate* or *nucleide*) is defined as a chemical compound of copper with nucleic acid, containing 6 per cent. of copper. It forms a green powder, soluble in water; its solutions do not coagulate albumin and are not precipitated by alkalis. It is employed pure or in 10-per-cent. solution as an astringent and antiseptic, largely in eye diseases.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

CURARIL is a preparation of curare, employed subcutaneously in tetanus. Dose, 2 c.c. increased every two or three hours, if no effect is produced, by 0.2 c.c. until effective, which dose is then repeated as necessary (every four hours or so). Boehm asserts that it is practically a $\frac{1}{2}$ per cent. solution of curare.—Mfr.: Dr. Heinr. Byk, Berlin, Germany; P. Puttnam, New York.

CURARINE, also known as *tubocurarine*, is the alkaloidal principle of curare (tubocurare). It forms a brown,

deliquescent powder, soluble in water and alcohol, and recommended by Hoffmann and Hacke in tetanus. Dose, hypodermically 1/60 to 1/12 grain. The antidotal treatment usually consists of applying atropine, strychnine, artificial respiration and stimulants.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

CURDELETTE POWDER is said to contain the lactic acid ferment; *curdelette chocolate tablets* are said to contain chocolate in addition. They are used for making sour milk.

CUSOL is a 1 per cent. solution of copper citrate obtained with the aid of sodium chloride and sodium borocitrate, the salt itself requiring 9143 parts of water for solution. It is employed mainly as a collyrium; but *cusol ointment* and *cusol powder* are employed in skin diseases.

CUTOL is *aluminium boro-tannate*, a light-brown powder containing 47 per cent. of tannic acid, 13.8 of alumina, and 39.2 per cent. of boric acid; insoluble in water, soluble in solutions of tartaric acid. It is used mainly as an astringent and antiseptic in skin diseases; pure or diluted, or as ointment. With tartaric acid it combines to form *soluble cutol (aluminium boro-tanno-tartrate)*, which is used in solution in certain skin diseases, gonorrhea, etc.—Mfr.: Apotheker Leuchter, Berlin W, Germany.

CUTOLIN is a styptic pencil made of aluminium borate, used for checking minor hemorrhages.

CYCLOFORM is a new local anesthetic possessing also mild vasoconstrictive and antiseptic action, and designed particularly for use on wounds, ulcers, burns, etc. Owing to its slight solubility in water and wound secretions it is said to have a prolonged effect coupled with diminished toxicity. It is applied pure or as 5 to 10 per cent. ointments or dusting-powders.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

CYLLIN is described as a creolin four times as concentrated as Pearson's creolin.—Mfrs.: Jeyes Sanitary Compounds Co., London, Eng.

CYPRIDOL is described as "a 1-per-cent. solution of mercuric iodide in an aseptic oil." It is used in syphilis. Marketed in 3-minim capsules containing 1/32 grain of H_2L_2 , and in 30 minim ampuls for subcutaneous injections. Dose, 6 to 12 capsules per day, with meals.—Mfrs.: E. Fougere & Co., New York.

CYSSATITE is a species of infusorial earth.

CYSTAMINE and CYSTOGEN are trade names for *hexamethylenetetramine*, now official as *hexamethylenamine*.

CYSTOPURIN is the trade name adopted for *hexamethylenamine* and *sodium acetate*. It occurs as white, slender, long needles that are freely soluble in water. It is intended as a substitute for hexamethylenamine.

(which is marketed under the names urotropin, formin, cystogen, cystamine, etc.). It should be noted that the use of formaldehyde preparations or of compounds that may produce it involves a possibility of bad effect on eyesight. See caution under *formaldehyde*.—Mfr.: Joh. A. Wülfing, Berlin SW, Germany.

D

DAMHOLID is a hemoglobin preparation used in hematuria of cattle. Damholid *liquid* contains 40 per cent. of hemoglobin and a little carbolic acid. Dose, 25 c.c. Must be kept in a cool place. Damholid I is a granular, blackish-brown, odorless powder, nearly completely soluble in 8 parts of water. Damholid II is a fine, brownish-red powder more difficultly soluble than No. 1. Dose of the two latter, 10 grains in solution.

DANOSANUM is a "blood-purifying" powder exploited as a remedy in respiratory affections. According to O. Kuhn, it is nothing but *herba galeopsidis* (yellow hemp nettle).—Mfrs.: Dr. J. Schaffner & Co., Berlin-Grünwald, Germany.

DARMAN is the name adopted for purgative tablets containing the supposed active principle of cascara with phenolphthalein.—Mfrs.: Darman-Gesellschaft, Offenbach, Germany.

DARMOL TABLETS are said to consist of chocolate and phenolphthalein. They are intended as a laxative.—Mfrs.: Apotheke zum heiligen Aegidius, Vienna V, Austria.

DAVOSIN, used abroad in various pulmonary affections, is said to consist essentially of chocolate containing 5 per cent. of guaiacol carbonate.—Mfr.: Davosinfabrik, Basle, Switzerland.

DEALIN is, according to Zernik, a mixture of 20 parts of sodium perborate, 10 parts each of boric acid and zinc oxide, and 60 parts of a mixture of talcum with a little starch and magnesium carbonate. It is employed as a veterinary vulnerary.—Mfrs.: Dealin-Werke, Berlin W, Germany.

DEBA is a trade-name for *diethylbarbituric acid*, better known as *veronal*.

DECALCIFYING TABLETS ("Entkalkungstabletten"), employed in arterio-sclerosis, contain per dose 0.5 gram of sodium chloride, 0.05 gram of sodium sulphate, 0.02 gram of sodium carbonate, 0.02 gram of sodium phosphate, 0.02 gram of magnesium phosphate, and 0.05 gram of calcium glycerinophosphate. Dose, one to several tablets.—Mfrs.: Dr. H. Miller & Co., Berlin C, Germany.

DECILAN is defined as "a solution of formaldehyde and potassium oleate, containing 6 per cent. of formaldehyde gas." It occurs as a clear, alkaline liquid which is miscible with water, alcohol or glycerin in all proportions. It

is used as an antiseptic and disinfectant.—Mfr.: Dr. A. Horowitz, Berlin N, Germany.

DECIQUOR is a stable, tenfold solution of peptonized iron and manganese, from which the ordinary solution is made by adding to each 100 grams the same quantity of alcohol and 800 grams of water.

DEDASOL is the name applied to tablets said to represent the active principles of physiologically standardized digitalis and each of which is stated to be the equivalent of $1\frac{1}{2}$ grains of the leaf.—Mfrs.: A. Voswinkel, Berlin, Germany.

DEKAFA is "coffee from which about 90 per cent. of its caffeine has been removed without impairing the flavor and aroma." It is offered as a supersessor of coffee as a beverage.—Agts.: Merck & Co., New York.

DELEOL is a prophylactic against gonorrhea, consisting of methylene blue, dried extract of equisetium (horse tail), and extract of dog-grass.—Mfr.: Schweizer-Apotheke, Berlin, Germany.

DELPHO-CURARINE is an alkaloid discovered by G. Heyl in various species of delphinium but especially in delphinium scopulorum. Dr. A. Lohmann has made physiological experiments with the *hydrochloride* (a yellowish-white, amorphous powder, readily soluble in water or alcohol), and states that it is calculated to supersede the commonly unreliable curare therapeutically; clinical data are yet wanting.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

DERICIN OIL is prepared by heating castor oil in an atmosphere of oxygen at 300° C. until a loss in weight of 10 to 12 per cent. is obtained. The preparation is able to absorb considerable quantities of water and is therefore useful for the preparation of ointments, soaps, etc.—Mfr.: Dr. H. Noerdlinger, Floersheim, Germany.

DERIVAL is a mixture of spirit of mustard, spirit of ammonia, and oil of turpentine, which is used as a liniment in rheumatism.

DERMALIN is an ointment-base analogous to lanolin.—Mfrs.: Dermalin-Gesellschaft, Berlin, Germany.

DERMASOT is not a skin remedy but a preparation for use in excessive sweating of the feet and consisting (according to Weber) essentially of a solution of aluminium acetate, colored with fuchsine and odorized with butyric or acetic ether.—Mfr.: Apotheker Bartschinger, Baden, Switzerland.

DERMATIN is a toilet powder consisting of salicylic acid, starch, talcum, silicic acid and alumina; also a substitute for gutta-percha tissue.

DERMATOL is a brand name for *bismuth subgallate*, now official.—Agts.: V. Koechl & Co., New York.

DERMOCRUCIN is defined as an ointment containing 50 per cent. of "Kreuznacher Mutterlauge" salt.

DERMOGEN is a brand name for *zinc peroxide*.—Mfrs.: Kirchof & Neirath, Berlin, Germany; agts.: Medical Dioxide Co., New York.

DERMOL, though defined by Trojescu as *bismuth chrysophanate*, $\text{Bi}(\text{C}_{12}\text{H}_7\text{O}_4)_3\text{Bi}_2\text{O}_3$, appears in reality to be a mixture of chrysophanic acid and bismuth hydroxide. It occurs as a yellow, amorphous powder, insoluble in the ordinary solvents. It is used as a drying antiseptic in skin diseases (especially psoriasis), in 5- to 20-per-cent. ointments.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York. Latterly a complexion cream has been placed upon this market under the name "dermol" by a Chicago firm.

DERMOSAPOL is a superfatted soap that readily takes up creosote, potassium iodide, thiocol, and other medicaments and favors their absorption through the skin. It thus forms the basis of a number of dermosapol preparations containing different active drugs.—Mfrs.: Engel Apotheke, Mülheim, Germany.

DERMOZONE is a lanolin and hydrogen peroxide toilet cream.—Mfr.: Dr. Homeyer, Berlin W., Germany.

DERMYDRIN, exploited as an external remedy for skin diseases, "blood poisoning," and lung and throat troubles, is said to contain phenol, glycerin, boric acid, potassium chlorate and acetic acid.

DESALGIN (*colloidal chloroform*), is an analgesic in powder form which represents 25 per cent. of chloroform combined with albumin. It is put forward for use in cases of gall-stones, intestinal colic, asthma and catarrhal diseases of the bronchial tubes. Dose, 5 to 15 grains.—Mfrs.: Vertriebsgesellschaft Dr. Schleich's Preparations, Berlin SW, Germany.

DESICHTOL is a deodorized ichthyol obtained by Helmers by passing steam through ichthyol, whereby the volatile oil (about $\frac{1}{2}$ per cent.) is driven off. Physically it resembles ichthyol, but whether it has the same therapeutic virtues is an open question.—Mfrs.: Ichthyol-Gesellschaft, Hamburg, Germany; agts.: Merck & Co., New York.

DESINFECTIN, a brownish-yellow liquid miscible with water, is said to be prepared from the residues left in the distillation of crude naphta (masut). It is intended as a general disinfectant.

DESINFECTOL is a mixture of resin soaps with tar oils containing cresol or with crude cresol. It yields a turbid solution with water, and appears to be analogous with the better known creolin as well as with izal.—Mfr.: Dr. Loewenstein, Rostock, Germany.

DESINFECTOL is the name applied also to a by-product of the manufacture of camphor, and containing varying

quantities of camphor terpenes, naphthalin, thymol, safrol, cresol and resin. It is used in Japan as an antiseptic, antiparasitic and general disinfectant and deodorant.

DESINFEKTON is a saponaceous mass obtained from naphtha residues. It is intended as a general disinfectant.

DESODOR is a mouth-wash containing formaldehyde as its important ingredient. See warning under *formaldehyde*.

DESOXY-ALIZARIN is *antharobin*, which see.

DETERGAL is "a liquid antiseptic and detergent soap," for use by surgeons, obstetricians, etc. It contains cresol and thymol as its germicidal constituents.—Mfr.: Sharp & Dohme, Baltimore, Md.

DEXTRILACTIC POWDER is described by the makers as "a combination of stable ferments including carlod, diastase, and sugar, and fat-splitting ferment. It is designed to accomplish two things of importance in the feeding of infants, especially sick infants and invalids: to prevent the formation of tough curds in milk; to cause the decomposition (digestion), absorption and assimilation of all the food elements, viz.: the proteid (curd), fat and sugar of milk, or any starch that may be added to the food of infants or invalids." We have seen it reported to be a mixture of 4 parts of diastase, 6 parts of carlod (papain), 5 parts of cellasin, 1 part of sodium bicarbonate, and sugar of milk.—Mfrs.: Mead Johnson & Co., Jersey City, N. J.

DEXTROFORM is a condensation-product of dextrin and formaldehyde, occurring as a white, almost odorless and tasteless powder, soluble in water or glycerin but insoluble in alcohol, ether or chloroform. It is intended as a wound antiseptic like iodoform, and has been recommended by Prof. Claassen in gonorrhea in $2\frac{1}{2}$ to 5 per cent. solution. See caution under *formaldehyde*.—Mfr.: Dr. L. W. Gans, Frankfort-on-M., Germany.

DEXTRO-SACCHARIN is said to be a mixture of glucose and saccharin.

DIABETIC SERUM.—See under *serums*.

DIABETIN was a trade name for *levulose*, which a few years ago came into vogue as a substitute for cane sugar in diabetes. The name has since been abandoned, and the article is now marketed as *levulose Schering*. See *levulose*.

DIABETIN PASTILLES are said to consist of saccharin, sodium bicarbonate and tartaric acid with some red coloring matter.

DIABETOL is a proprietary "diabetes cure, a herbal remedy consisting of a tropical herb." The botanical name and source of the plant are not divulged; but according to Prof. C. F. Millsbaugh, curator of the department of botany of the Field Museum at Chicago, Ill., the drug is es-

sentially the stem and leaves of a shrub belonging to the bignonia family and known as *stenolobium stans* (bignonia stans). This shrub grows more or less plentifully from Arizona southward through Mexico and Central America, throughout the West Indies and to the Bahamas and south Florida.—Mfrs.: Ames Chem. Co., Whitney's Point, N. Y.

DIABETSERIN is an artificial serum used as an anti-diabetic. To overcome the hepatic stagnation present in cases of diabetes, to increase the flow of bile into the intestines and to improve metabolism by establishing normal circulation, as far as possible, Dr. M. Fraenkel has resorted to the use of a combination of Trunecek's serum (used principally in arterial sclerosis) with eserine and obtained good results. Two strengths are recommended. *Diabetserin No. 1* contains the salts of Trunecek's serum with 0.07 per cent. of eserine salicylate. Two of the tablets represent 0.0005 gram of eserine and the salts of 100 c.c. of blood serum. *Diabetserin No. 2* consists of diabetserin No. 1 with 0.0118 per cent. of atropine; equivalent to 0.0001 gram of atropine in two tablets. The atropine is said to increase the action of the eserine; and the remedy is specially indicated where there are cramp-like pains in diabetic cases. The dose of either combination is 1 or 2 tablets thrice daily.—Mfr.: Wm. Natterer, Munich II, Germany.

DIACELLOSE. See *regulin*.

DIACETYL-MORPHINE (*acetylated morphine*), $C_{17}H_{17}(C_2H_3O_2)_2NO$, is a white, crystalline, odorless, bitter powder; practically insoluble in water or ether, soluble in chloroform. It is used as a succedaneum for morphine, and is used chiefly in diseases of the air-passages attended with cough, difficult breathing and spasm. Dose, 1/24 to 1/6 grain three or four times a day.—(Nonproprietary.)

DIACETYL-MORPHINE HYDROCHLORIDE occurs as a white, crystalline, odorless, bitter, neutral powder, soluble in about 2 parts of water and soluble also in alcohol but insoluble in ether. Its action and uses are the same as those of the base.—(Nonproprietary.)

DIACETYL-RUFIGALLOL-TETRAMETHYL ETHER.—See *exodin*.

DIALKALOS is an effervescent granular salt containing in each dose caffeine $\frac{1}{2}$ grain, potassium bromide 5 grains, lithium carbonate $2\frac{1}{2}$ grains, sodium phosphate 5 grains and formamine (hexamethylenamine) $2\frac{1}{2}$ grains. It is used as an alkaline diuretic, urinary disinfectant and antilithic.—Mfr.: Sharp & Dohme, Baltimore, Md.

DIALON is "an antiseptic diachylon wound powder" made by K. Engelhard, Frankfort-on-M., Germany.

DIAMIN, put forward for the treatment of diabetes, is said to be prepared from syzigium jambolanum.

DIANOL. Under this name the glycerin esters of lactic acid are marketed. *Dianol I* represents the monolactate with 54.8 per cent. of lactic acid; *Dianol II* is the dilactate and contains 76.3 per cent. of the acid; and *Dianol III* is the trilactate, with an acid content of 87.7 per cent. These preparations are designed for cauterization in throat and nose troubles.

DIAPHANIT is a mixture of cacao, milk sugar, salep and finely powdered lodestone, used in X ray work on the stomach instead of bismuth subnitrate. For an examination 150 to 200 grams are mixed with 300 grams of water and drunk by the patient.

DIAPHOTHERIN is the fanciful name applied to *oxyquinaseptol* or *oxyquinoline phenolsulphonate*, formed by uniting 1 molecule of ortho-phenolsulphonic acid and 2 molecules of ortho-oxyquinoline. It occurs as a yellow powder, soluble in water or diluted alcohol. It was introduced some years ago as a non-toxic surgical antiseptic as well as anti-rheumatic, but has not been mentioned in literature latterly and has been withdrawn from this market. Dose, 8 to 15 grains a day; applied externally in $\frac{1}{2}$ to 2-per-cent. solutions.—Mfrs.: Meister, Lucius & Brünning, Hoechst-on-M., Germany; agts.: V. Koechl & Co., New York.

DIAPHTOL (*quinaseptol, chinaseptol, or orthooxyquinoline-metasulphonic acid*), $C_9H_5N.OH.SO_3H$, occurs as yellowish crystals or powder, slightly soluble in cold water. It was introduced by Guignard as a urinary disinfectant, to replace salol. Dose, same as of salol.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

DIASPIRIN is the *succinic acid ester of salicylic acid*, occurring as an odorless, almost tasteless, crystalline powder, melting at about 178° C., very sparingly soluble in water, alcohol or acidulous liquids, and slowly decomposed by alkaline liquids. It is used as an antirheumatic, analgesic and antipyretic, acting much like aspirin but more strongly diaphoretic. Dose, 5 to 15 grains several times daily, as powders or tablets (so marketed).—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

DIASTIN is a brand of diastase, prescribed chiefly in amylaceous dyspepsia in doses of 5 grains.—Mfrs.: Organic Chem. Co., Philadelphia, Pa.

DIASTOID is a dry extract of malt made by Horlick's Malted Milk Co., Racine, Wis.

DIATHEION is "pure and freely diffusible sulphur in a bland medium; also contains infinitesimal traces of sillicic, fluoric, and formic acids."

DIATHESIN is the name applied to synthetically prepared (from carbolic acid and formaldehyde) *saligenin* (ortho-oxy-benzyl alcohol, $C_7H_5O_2$) which was formerly obtained from salicin by hydrolysis. It occurs as fine,

white leaflets, slightly bitter in taste, soluble in about 15 parts of water and freely so in alcohol or ether. Mineral acids and alkalis decompose it. It is employed in place of the salicylates in rheumatism, tonsillitis, etc. Dose, $7\frac{1}{2}$ to 20 grains.—Mfrs.: Chem. Fabrik Sulzbach, near Nürnberg, Germany; agts.: C. Bischoff & Co., New York.

DIATUSSIN is a liquid preparation offered as a whooping-cough remedy, employed in doses of 1 to 5 drops every few hours. Marketed also as tablets called *solitussin*, each of which contains 1 drop of antitussin, and as *dros-erol*, a teaspoonful of which represents 1 drop of liquid diatussin.—Selling agts.: Ernst Bischoff & Co., New York.

DIAZYME ESSENCE is said to contain the amylolytic enzyme of the pancreas devoid of trypsin and lipase, in a menstruum containing $18\frac{1}{2}$ per cent. of alcohol by volume. It is an amber-colored liquid of aromatic odor and taste and slightly acid reaction. It is used as a starch-digestant to compensate for deficient salivary and pancreatic action. Dose, 1 to 2 fluid drams.—Mfrs.: Fairchild Bros. & Foster, New York.

DIAZYME GLYCEROLE is a liquid amylolytic stated to contain the amylolytic enzyme of the pancreas, devoid of trypsin and lipase, in a menstruum containing about 60 per cent. of glycerin by volume. It is a dense, amber-colored fluid of agreeable odor and taste and slightly acid reaction. Action and dose, same as of diazyme essence.—Mfrs.: Fairchild Bros. & Foster, New York.

DIBROMO-DIODO-HEXAMETHYLENETETRAMINE is referred to under its trade name *chrysoform*.

DIBROMO-GALLIC or DIBROMO-TRIOXYBENZOIC ACID is better known as *gallobromol*; see this.

DIBROMO-SALICYLIC ACID METHYL ESTER is the chemical designation of *salibromin*, which see.

DIDYMIN is a trade name applied to the dried and powdered fat-free testicular substance of the bull. It is marketed as tablets each representing 5 grains of the fresh organ and constituting the dose. It is used as an aphrodisiac.—Mfrs.: Burroughs, Wellcome & Co., London and New York.

DIDYMIUM SALICYLATE is referred to under its trade name *dymal*.

DIETHYL-ACETAL and DIETHYL-ALDEHYDE are synonymous with *acetal*.

DIETHYLAMIDE VALERIANATE is *valyl*.

DIETHYLENEDIAMINE is the chemical designation for *piperazine*.

DIETHYLGLYCOCOLL-GUAIACOL HYDROCHLORIDE is the chemical name of *gujasanol*; see the latter.

DIETHYL-KETONE also known as *proprione*, *metacetone*, and *ethyl-propionyl*, is obtained from the distillation

of sugar with an excess of lime. It forms a thin, colorless, light liquid, smelling like acetone, and freely soluble in alcohol or ether, less readily so in water. It was recommended by Dr. G. Noera as a hypnotic and sedative (in mania) in doses of 10 to 40 minims.—Mfr. E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

DIETHYL-MALONYL-UREA is better known as *veronal*, which see.

DIETHYLOXYACETYLUREA, $C_{12}H_{24}N_2O_6$, is a new hypnotic introduced by Dr. E. M. Houghton, of Detroit, Mich. It occurs as a clear, transparent, oily liquid, of the specific gravity 1.111, with a characteristic ethereal odor and taste. It is soluble in about 20 parts of water, and soluble also in alcohol, ether and chloroform. Its sodium salt forms beautiful flakelike crystals which are very soluble in water and have a mild, peculiar taste.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

DIETHYL-SULPHONE-METHYL-METHANE and DIETHYL-SULPHONE-METHYL-ETHYL-METHANE are the chemical appellations for *sulfonal* and *trional* respectively, now official under the names *sulphonmethane* and *sulphonethylmethane*.

DIFLUORDIPHENYL is described under *antitussin*.

DIGALEN (*"liquor digitoxini solubilis"*) is said to be a sterile solution of 1 part of soluble digitoxin (Cloetta) in 1,000 parts of glycerin and 1,600 parts of distilled water. It is recommended as a cardiac tonic and sustainer. Dose, 1 to 2 c.c.; intravenously, 1 c.c.—Mfrs.: F. Hoffmann-La Roche & Co., Basle, Switzerland; agts.: Hoffmann-La Roche Chem. Works, New York.

DIGESTIN is an enzyme secreted by the fungus *aspergillus okazaki*. To obtain the ferment the fungous growth developed on steamed rice mash is aseptically digested with a certain quantity of water, the enzyme precipitated from the filtrate with alcohol and the resulting precipitate purified and dried. The proteolytic action of the ferment was tested by K. Okazaki, the discoverer, upon coagulated albumins, fibrin and gelatin. These were all promptly liquefied, and there was distinct biuret reaction.—Mfr.: "Yenjo."

DIGIPURATUM is a purified extract of digitalis, said to contain 0.4 per cent. of digitoxin and 4 per cent. of digitalin in the form of a tannate. It is standardized biologically by the method of Gottlieb. It is claimed that 85 per cent. of the inactive substances found in the ordinary extract have been removed and that it is free from digitonin and other gastric irritants. Digipuratum is a greenish-yellow, odorless, bitter powder. Its action, dose and uses are the same as digitalis, but it is claimed that it is less liable to disturb the stomach, and on account of its exact dosage cumulative effects can be more easily avoided than with the ordinary digitalis preparations.

Marketed also as 1½-grain tablets. Mfr.: Knoll & Co., Ludwigshafen-on-Rh. and New York.

DIGISTROPHAN is the name applied to tablets claimed to contain all the active principles of digitalis leaves and strophanthus seed. They are obtained by evaporating the fluidextracts to dryness in vacuo, with the addition of milk sugar. Each tablet represents 0.1 Gm. (1½ grains) of digitalis and 0.05 Gm. (¾ grain) of strophanthus. *Digistrophan diuretic No. I* contains per tablet 0.1 Gm. (1½ grains) of digitalis 0.05 Gm. (¾ grain) of strophanthus and 0.2 Gm. (3 grains) of sodium acetate; and *digistrophan diuretic No. II* contains per tablet 0.1 Gm. (1½ grains) of digitalis, 0.05 Gm. (¾ grain) of strophanthus, 0.2 Gm. (3 grains) of sodium acetate and 0.15 Gm. (2¼ grains) of caffeine. Uses: as a heart tonic. Mfrs.: Goeckcke & Co., Berlin; agts.: Schering & Glatz, New York.

DIGITALIN is a drug about which considerable confusion exists among pharmacists as well as physicians. Four different digitalins are known: (1) *Digitalin French Amorphous*, also designated as "digitaline chloromique" or "Homolle's amorphous digitalin," a yellowish powder soluble in chloroform or alcohol, but insoluble in water and given in doses of 1/250 grain rapidly increased until 1/40 grain is taken daily; (2) *Nativelle's Crystalline Digitalin*, which is practically identical with digitoxin and hence employed in the same doses; (3) *digitalin Kiliani* or so-called "digitalinum verum," a water-insoluble product administered in doses of 1/30 to 1/10 grain several times daily gradually increased to ½ grain; and (4) *Digitalin German*, a yellowish-white powder soluble (though incompletely) in water or alcohol and almost insoluble in chloroform. It appears to be practically the only digitalin known to American physicians, probably because it has repeatedly been referred to during the past few years in the American medical press. As regards the dose of this digitalin, this was formerly stated to be from 1/64 to 1/32 grain several times a day. Some years ago, however, Dr. Henry Beates, Jr., of Philadelphia, made a thorough clinical investigation of German digitalin and arrived at the conclusion that the proper dosage is 1/10 to ½ grain three or four times daily, and latterly he has given as much as 1 grain at a dose. The so-called "digitalin crystallized" is in reality digitin and identical with crystalline digitonin, and thus lacks the specific cardiac action of digitalis.—Mfrs.: *French*, *Natville's* and *German*, E. Merck, Darmstadt; *Kilian*, C. F. Boehringer & Soehne, Mannheim, Germany; agts.: Merck & Co., for all.

DIGITALIOL is the name applied to capsules containing physiologically standardized powdered digitalis and oil in various proportions.—Mfrs.: Laboratorium Funck, Radebeul, Germany.

DIGITALONE, according to its introducer, Dr. E. M. Houghton, is the outcome of attempts to obtain a uni-

formly active, sterile and non-irritating preparation of digitalis adapted for subcutaneous as well as internal use. It is a non-alcoholic liquid, 10 parts representing 1 part of the crude drug, and containing about 0.6 per cent. of chloretone as a preservative. Dose, 5 to 30 minims.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

DIGITALYSATUM is a standardized preparation of fresh digitalis leaves, each gram of which represents a gram of fresh or 0.2 gram of dried digitalis leaves. It is employed internally and subcutaneously, in doses of 5 to 15 minims several times daily; the maximum daily dose being 75 minims.—Mfr.: J. Bürger, Wernigerode, Germany; agts.: Ernst Bischoff & Co., New York.

DIGITOL is a trade name applied to fat-free tincture of digitalis of the same drug strength as the official tincture.—Mfrs.: H. K. Mulford Co., Philadelphia, Pa.

DIGITONIN (*crystallized digitalin Merck*, or *digitin*) is separated from German digitalin of which it is a component, and occurs as colorless needles which dissolve in about 600 parts of water and 50 parts of 50 per cent. alcohol. It is not absorbed and is without action on the heart when taken by the mouth, and when introduced into the circulation it acts as a cardiac depressant.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

DIGITOXIN, $C_{28}H_{48}O_{16}$, is the most active glucoside of digitalis. It occurs as a white, crystalline powder, almost insoluble in water or ether but soluble in alcohol or chloroform. It has been recommended as a heart tonic of uniform activity owing to its well-defined chemical nature. Dose, 1/250 to 1/60 grain. Incompatible with acids and vegetable infusions. Antidotes: tannin, then emetics; nitroglycerin, morphine, alcoholic stimulants or camphor.—Mfrs.: E. Merck, Darmstadt, and Boehringer & Soehne, Mannheim, Germany; agts.: Merck & Co., New York.

DIGITOXIN SOLUBLE.—See *digalen*.

DIGITOXIN SOLUBLE TITRATED is exploited as a substitute for *digalen* (Cloetta's soluble digitoxin) and claimed to represent the full medicinal virtues of digitalis leaves.—Mfrs.: Hoeckert & Michaelowsky, Berlin SW, Germany.

DIIDO-BETA-NAPHTOL, $C_{10}H_6I_2O$, a yellowish-green powder of faint iodine odor and readily soluble in chloroform, was introduced a few years ago as a substitute for iodoform; it is known also as "naphtol-aristol."

DIIDO-CARBAZOLE, $C_{12}H_8I_2NH$, results from the action of iodine upon diphenylimide (carbazole). It forms yellow, odorless leaflets, insoluble in water but soluble in ether. It is intended as a substitute for iodoform as a wound antiseptic.

DIIDO-DITHYMOL is a chemical synonym of *aristol*, now official as *thymol iodide*.

DIODOFORM, chemically *ethylene per- or tetraiodide*, or *iodoethylene*, C_2I_4 , is obtained from acetylene iodide and an excess of iodine. It occurs as yellow needles, odorless when first made but assuming a characteristic odor on exposure to light, soluble in chloroform, slightly so in alcohol or ether, and insoluble in water. It was introduced in France as a substitute for iodoform; it contains 95 per cent. of iodine.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

DIODO-PARA-PHENOLSULPHONIC ACID.—See *sozoiodole*.

DIODO-SALOL (*diiodo-salicylic acid phenyl ester*) occurs as colorless crystals insoluble in water and soluble in alcohol. It is intended as a substitute for iodoform externally, and for the salicylates and iodides internally. It has not met with favor.

DIODO-THIO-RESORCIN, $C_6H_2O_2I_2S_2$, is another wound antiseptic that has not gained prominence. It forms a brown powder, soluble in alcohol, and used in powders and ointments like iodoform.

DIJOL-MERCURY, **DIJOL-POTASSIUM** and **DIJOL-SODIUM** are analogues of and succedanea for the respective *sozoiodole* salts, marketed by a Berlin firm.

DIMETHYLAMINOPARAXANTHINE. See *pararin*.

DIMETHYLBENZENE.—See *xylene*.

DIMETHYLETHYL-CARBINOL is better known as *amylen hydrate*.

DIMETHYLETHYLCARBINOL-CHLORAL.—See *dormiol*.

DIMETHYL-OXY-QUINIZINE is a chemical name for *antipyrine*.

DIMETHYL-SULPHONE-DIMETHYL-METHANE.—See *menthonal*.

DIMETHYL-XANTHINE is *theobromine*.

DIOFORM is what Villinger calls *acetylene dichloride*, which he recommends as an inhalation anesthetic. It is a colorless liquid of the specific gravity 1.20 and possessing an odor like that of chloroform.

DIOMORPHINE (*Brüggemann's solution*) is a 10-per cent. solution of dionin with 1 per cent. of morphine hydrochloride, which he injects hypodermically during paroxysms of asthma. Dose, 5 to 10 drops. Another diomorphine is described as a coca preparation containing atropine, cocaine, glycerin and an acid and used as an inhalation spray in paroxysms of asthma.—Mfr.: Askanische Apotheke, Berlin S. W., Germany.

DIONIN (*ethyl-morphine hydrochloride*), $C_{17}H_{19}NO(OH)(OC_2H_5).HCl + H_2O$, is prepared from morphine analogously to codeine (methyl-morphine). It occurs as a white, bit-

ter, odorless powder, soluble in about 7 parts of water, $1\frac{1}{2}$ alcohol, or 20 syrup, but insoluble in ether or chloroform. It is used chiefly as a substitute for morphine. Dose, $\frac{1}{4}$ to 1 grain.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

DIOPIRANUM is said to be identical with *pyramidon*.

DIOSMAL is a ligroin-alcoholic extract of buchu which is administered in doses of 5 to 10 grains thrice daily.—Mfr.: Dr. F. Runge, Hamburg, Germany.

DIOXOGEN is a trade name for a certain brand of hydrogen peroxide solution 3 per cent.—Oakland Chem. Co., New York.

DIOXYANTHROL is described under *anthrarobin*.

DIOXYBENZENE (-benzol), META-, is *resorcin*; PARA-*hydroquinone*; and ORTHO-, *pyrocatechin*.

DIOXYBENZENE-HEXAMETHYLENETETRAMINE is marketed as *hetralin*, which see.

DIOXYDIAMINOARSENOBENZOL, also commonly referred to as *arsenobenzol*, $C_{12}H_{10}O_2N_2As_2$, is an arsenical evolved by Prof. Ehrlich, of the Royal Institute for Experimental Therapeutics, Frankfort-on-M., Germany, and intended for use as a specific in syphilis. It is used either by injection into the gluteal muscles or intravenously. The article occurs as a yellow powder that is insoluble in water. The average dose is 5 grains, injected once or twice a week, according to the requirements of the case. For use, the substance is first dissolved in sodium hydroxide solution and then neutralized by adding glacial acetic acid drop by drop. This causes the formation of a fine, yellow precipitate, which is suspended in distilled water and injected. It is marketed in 0.3-gram (5-grain) tubes, the contents of which constitute the ordinary dose.—Mfrs.: Meister, Lucius & Brünig, Hoechst-on-M., Germany; agts.: Victor Koechl & Co., New York.

DIOXYMETHYL-ANTHRAQUINONE is *chrysarobin*.

DI-PARA-ANISYL-MONOPHENETYL-GUANIDINE HYDROCHLORIDE is the chemical designation for *acoin*.

DIPHENYLAMINE THYMOL-BENZOATE is a compound introduced as an analogue of and substitute for *arhovin*, an internal antigonorrheal and urinary disinfectant. Mfrs.: Hoeckert & Michaelowsky, Berlin SW, Germany.

DIPHENYLOXALIC ETHER is a new phenol surrogate; non-hygroscopic and permanent in air. It is marketed in the form of tablets called "carbolic acid tablets."

DIPHThERIA ANTITOXIN.—See *antitoxin*, *diphtheria*.

DIPHThERICIDE of Bergmann is chewing-gum in the form of pastilles containing gutta percha, gum damar, sodium benzoate, thymol, and saccharin, and intended for use as a preventative of diphtheria.

DIPLOSAL is the trade name applied to *salicylo-salicylic acid* or *salicylic acid ester of salicylic acid*, $\text{OH.C}_6\text{H}_4.\text{COO.C}_6\text{H}_4.\text{COOH}$. It occurs as colorless, odorless, bitter needles, soluble in alcohol and ether, and insoluble in water. It is put forward as a substitute for salicylic acid, and claimed to be free from untoward effects. Dose, 10 to 15 grains several times daily.—Mfrs.: Boehringer & Soehne, Mannheim, Germany; agts.: Merck & Co., New York.

DIPROPESIN consists of two molecules of propesin coupled by CO. Its melting-point lies between 171° and 172° C., and it occurs as a white, light, odorless and tasteless powder of neutral reaction. It is insoluble in water. By itself it has not anesthetic action, but in physiologic alkaline solutions it decomposes and the propesin is liberated. This last named substance has anesthetic power, which it then manifests. Dipropesin is employed as an internal local anesthetic in painful affections of the intestines and in gastric ulcer and cancer. Dose, $7\frac{1}{2}$ to 15 grains. Mfrs.: Franz Fritsche & Co., Hamburg, Germany; agts.: Parmele Pharmacal Co., New York.

DIPROPYLACET-PARA-PHENETIDIN is obtained by heating dipropylacetic acid with para-phenetidin. It possesses antipyretic and hypnotic properties at the same time, a combination hitherto unattained, it is claimed. The new compound melts at 147° C., and is quite freely soluble in alcohol but sparingly soluble in water.—Mfrs.: Aktien-Gesellschaft für Anilinfabrikation, Berlin, Germany; agts.: Lehn & Fink, New York.

DIQUININE CARBONIC ESTER or **ETHER** is better known as *aristochin*.

DISINFECTINE is a disinfectant soap of unknown composition.

DISINFECTOL is a disinfectant liquid consisting essentially of resin soaps, tar oils, and sodium cresols.—Mfr.: Dr. Löwenstein, Rostock, Germany.

DISKOHOL is a secret remedy exploited as a cure for dipsomania. According to Dr. F. Zernik, the powder form of the preparation consists of a mixture of sulphur, peony root, sodium carbonate and tartaric acid or potassium tartrate.—Mfr.: Dr. Burghardt, Dresden A, Germany.

DISODIUM METHYLARSENATE, or *sodium methylarsenate*, $\text{OAsCH}_3\text{O}_2\text{Na}_2 + 5\text{H}_2\text{O}$, results from the action of methyl iodide upon sodium arsenate in the presence of an excess of alkali. It forms colorless, efflorescent crystals of alkaline reaction and taste, readily soluble in water, sparingly so in alcohol, and insoluble in ether or oils. It is considered an improvement on sodium cacodylate (mono-sodium di-methylarsenate), not imparting a garlicky odor to the breath and perspiration as the latter does. It is used as a substitute for the inorganic com-

pounds of arsenic in tuberculosis, malaria, skin diseases, etc. Dose, $\frac{1}{3}$ to 1 grain. The drug is also known by various trade names such as *arrheneal*, *neo-arsycodile*, *arsynal*, *stenosine*, etc.—(Nonproprietary.)

DISODOQUINONE PHENOLPHTHALEINATE. See *sodophthalyl*.

DISOTRIN is a new name for the article described under the title *digitoxin soluble titrated*.—Mfrs.: Hoeckert & Michalowsky, Berlin SW, Germany.

DISPERMINE is synonymous with *piperazine*.

DISPNON TABLETS each contain 0.25 gram of diuretin, 0.1 gram of agurin and 0.1 gram of extract of quebracho. They are employed in asthmatic affections. Dose, 2 tablets three or four times daily.—Mfrs.: Apotheke zur Austria, Vienna IX, Austria.

DITHAN is a brand name for the official *sulphonethylmethane* ("trional").

DITHION is a mixture of sodium alpha- and beta-dithiosalicylates; a yellowish-gray powder soluble in water and used in foot and mouth diseases of cattle in 2½- to 5-per-cent. solution.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

DITHYMOL DIODIDE is synonymous with *thymol iodide* (official).

DIUIDINE (Szölössi) is a pastille of theobromine iodide, intended for use in arteriosclerosis.—Mfrs.: Fritz, Petzold & Süss, Vienna, Austria.

DIURAZIN is defined as *theobromine acetyl-methylene-disalicylate*. It is brought forward as a diuretic. See caution under *formaldehyde*.—Mfrs.: Organic Chem. Co., Philadelphia, Pa.

DIURETAL is *theobromine-sodium*.

DIURETIN is a brand of *theobromine-sodium and sodium salicylate* or *theobromine and sodium salicylate* as it is more commonly called; see this.—Mfrs.: Knoll & Co., Ludwigshafen-on-Rh. and New York.

DIUROL is a liquid diuretic and urinary anticatarrhal, each fluidounce of which contains of buchu, triticum, saw palmetto, hydrangea and pichi each 16 grains, hyoscyamus 2 grains, lithium benzoate 4 grains and potassium bicarbonate 8 grains. Dose, dessertspoonful to tablespoonful three or four times a day. Mfr.: H. K. Mulford Co., Philadelphia, Pa.

DIVINAL is a compound of silicic acid, alumina, ferric oxide, lime, chalk, magnesia, and magnesium carbonate. It is used as an addition to baths as well as by hot local application in gout, rheumatism, nervous affections, etc.—Mfr.: Carl Bader, Munich, Germany.

DJOEATIN is a synonym of *antimellin*, which see.

DOLOMOL is a trade name of *magnesium stearate* (talcum). It is marketed in various combinations, for example: dolomol-acetanilid; dolomol-ichthyol, etc. The different combinations are all for dermatological and surgical use.—Mfr.: Pulvola Chem. Co., Jersey City, N. J.

DOLONEPHRAN is a dental and surgical anesthetic containing alypin (a local anesthetic), and suprarenin (brand of the vasoconstrictive principle of the suprarenal capsule).—Mfrs.: Chem. Institute, Berlin W, Germany.

DOLORANT Tablets each contain, it is stated, 0.0001 gram of adrenalin, 0.01 gram of cocaine and 0.00199 gram of sodium chloride. They are employed in solution as a local anesthetic in the extraction of teeth.—Mfrs.: "Chemische Industrie," St. Margarethen, Switzerland.

DORMIOL is chemically *amylene-chloral* or *dimethyl-ethyl-carbinol-chloral*, $\text{CCl}_3\text{CHOH.O}(\text{CH}_3)_2\text{C.C}_2\text{H}_5$, a colorless, oily liquid, of the specific gravity 1.24, pungent, camphoraceous odor and cooling taste; soluble very slowly but freely in hot water, miscible in all proportions in alcohol, ether, chloroform or fatty oils. It is prescribed as a hypnotic in doses of 8 to 30 minims, in water or capsules. Marketed as 50-per-cent. aqueous solution, and as 0.5 gram capsules.—Mfrs.: Kalle & Co., Biebrich, Germany; agts.: Merck & Co., New York.

DORMITIV is a hypnotic said to consist of an alcoholic extract of *lactuca sativa* with ainsé oil and sugar.

DOSTRAH BLOOD-PURIFYING POWDER is said to consist of magnesium oxide, magnesium peroxide, sugar, milk sugar, citric acid, starch, pepsin, and powdered licorice. *Dostrah Ointment* is said to consist of magnesium oxide, lanolin, petrolatum, white wax and boric acid. *Dostrah Tincture*, put forward as an application in rheumatism, is said to consist of camphor, turpentine, menthol, myrrh tincture, terpineol and alcohol.—Mfrs.: Dr. Strahl's Chem. Laboratorium, Hamburg B, Germany.

DRAGOLET is a malt extract mixed with cacao deprived of its fat. It is exploited as a nutritive as well as an amylolytic.—Mfr.: M. Hoff, Hamburg, Germany.

DROSERIN is the name given to tablets said to contain the peptonizing ferment of various droseraceous plants together with milk sugar. It is furnished in two strengths, No. 2 being five times as strong as No. 1. It is offered as a remedy in whooping cough. Dose, for children under 1 year, 1 tablet No. 1 every two to four hours; older children take 1 to 3 tablets, according to the age of the patient and the severity of the disease.—Mfrs.: Drs. R. & O. Weil, Frankfort-on-M., Germany.

DROSEROL is a dilution of diatussin, each teaspoonful representing 1 drop of the latter. See diatussin.

DULCINOL is said to be a mixture of mannite with a small quantity of salt, the latter being employed for

the purpose of imparting a pleasant taste. It is marketed as *dulcinol-chocolate*, containing only about 9 per cent. of carbohydrates, the mixture being recommended as a sweetener in place of sugar for diabetic patients.—Mfrs.: J. D. Riedel Co., Berlin (Germany) and New York.

DURALCOL is the collective name applied to mull bandages with solid alcohol, solid opodeldoc, 5 per cent. ichthyol, etc., which are intended to replace inunctions or embrocations. A piece of sufficient size is applied over the affected part, covered with guttapercha tissue or other impervious material and kept in place by a suitable bandage.—Mfrs.: Chem. Fabrik Helfenberg, Helfenberg, Saxony; agts.: C. Reinschild Co., New York.

DURAN is described as a preparation containing calcium and magnesium carbonates and phosphates, in combination with albumin; a white powder, marketed also as chocolate-coated tablets, and intended for use in rickets and other cachectic diseases of children. According to an analysis by Dr. Aufrecht it consists essentially of a mixture of about 30 per cent. of cacao, 50 per cent. of sugar, and 10 per cent. each of calcium carbonate and calcium phosphate.—Mfrs.: Ludwig Sell & Co., Munich, Germany.

DURANA is a collective name for gutta percha plaster mulls prepared according to Unna's principles by Drs. Degen and Kuth, of Düren (Rheinland), Germany.

DURINUM is an umbilical plaster consisting of several discs of rubber adhesive plaster so arranged as to be thickest in the center.—Mfrs.: Chem. Fabrik Helfenberg, Helfenberg, Germany; agts.: C. Reinschild Co., New York.

DUROFORM is a formaldehyde preparation exploited as an application for excessive perspiration. *See caution under formaldehyde.* Mfr.: H. Ascher, Mannheim, Germany.

DYGESTIV is a cordial of bromelin, the supposed digestive principle of pineapple juice, and papain, the digestive ferment of the papaw. It is prescribed as a digestant and also as a vehicle for bromides, etc. Dose, 2 to 4 teaspoonfuls, immediately after meals.—Mfrs.: Hege-man & Co., New York.

DYMAL is essentially *didymium salicylate*, $\text{Dl}_2(\text{C}_6\text{H}_5\text{OH}\cdot\text{COO})_2$; a fine odorless, pinkish-white, insoluble powder, introduced by Prof. Kopp as a siccative wound antiseptic, to be employed pure or as 10-per-cent. dusting-powder or ointment. It is a by-product in the manufacture of incandescent mantles. A *veterinary* grade is also marketed.—Mfrs.: Zimmer & Co., Frankfurt-on-M., Germany; agts.: C. Bischoff & Co., New York.

DYMOL is an intestinal remedy of undivulged composition. Dose, 1 to 3 grains.

DYNAMINE is "a distillate of tobacco containing considerable nicotine," hence it is too energetic for

internal use, and should only be employed externally. It is employed in eclectic medicine as a topical antineuralgic and anodyne, also, in diluted form, as an antiseptic and alterative dermic.—Mfrs.: Lloyd Bros., Cincinnati, O.

DYNAMOGEN is a blood preparation similar to Hommel's *hematogen* and used like it in anemia.—Mfr.: Apotheke in Schneidemühl, Germany.

DUOTAL is a trade name for *guaiacol carbonate*, as sold in this country by the Farbenfabriken of Elberfeld Co. and by Schering & Glatz, both of New York.

DUOTONOL is a mixture of calcium and sodium glycerophosphates ("tonols") in equal proportions, a white, granular powder, freely soluble in water. It is used as a nerve tonic. Dose, 5 to 10 grains three times daily.—Mfr.: E. Schering, Berlin; agts.: Schering & Glatz, New York.

DUOZYMA ELIXIR is an elixir of pepsin, diastase and hydrastis, each 100 c.c. of which is said to represent pepsin (1:3000) 2.2 grams, malt diastase 0.22 gram, golden seal 0.22 gram, glycerin 10 c.c. and alcohol 15 per cent. It is used as a digestive and stomachic.—Mfrs.: Louisville Pharmacal Works, Louisville, Ky.

DYSENTROL is described as a fluidextract of "bidam," useful in dysentery and diarrhea. Dose, a teaspoonful three times daily. Marketed also as tablets, which probably contain the fluid extract in the form of a solid or powdered extract, and the dose of which is 1 or 2 thrice daily.—Mfrs.: Chem. Works "Erfurt," Erfurt, Germany.

DYSPEPTINE, according to Dr. Hepp, is "natural gastric juice of healthy pigs, rendered sterile without addition of foreign substances and preserved in sterilized flasks." Dose, 1 to 3 tablespoonfuls after meals, in dyspepsia.—Mfr.: H. Derenburg, Frankfort-on-M., Germany.

DYSPHAGIA TABLETS contain, according to the makers, $1\frac{1}{2}$ grains of cocaine hydrochloride and $\frac{1}{6}$ grain of menthol per tablet. As the name indicates, they are used in dysphagia (difficult swallowing).—Mfrs.: Hobes Apotheke, Berlin.

DYSPHAGIN TABLETS, No. 1, are said to contain cocaine, menthol, anesthesin, borax and aromatics. No. 2, the same ingredients with the exception of cocaine. No. 3, anesthesin, citric acid, tannic acid and aluminum acetate. They are exploited for the treatment of angina and throat troubles.—Mfr.: Dr. A. Horowitz, Berlin, Germany.

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ECHAFOLTA is an eclectic preparation of the drug *echinacea angustifolium*, intended as an internal antiseptic and alterative.—Mfrs.: Lloyd Bros., Cincinnati, O.

ECHIDINE is said to be a combination of iodine with the active principles of echinacea and thuja. It is an anti-purulent and alterative, used internally (chiefly) and externally. Dose, 2 to 5 minims, well diluted, two to six times daily. Applied to syphilitic ulcers, abscesses, etc., in full strength or diluted.—Mfrs.: Pixine Chem. Co., Troy, N. Y.

ECHINACEA ANGUSTIFOLIA is one of the so-called "specific medicines," each fluid ounce of which represents 480 grains of the drug in absolute alcohol. It is offered as an alterative and antiseptic. Dose, 5 to 60 minims every one to four hours; applied externally in 10 to 25 per cent. dilution.—Mfrs.: Lloyd Bros., Cincinnati, O.

ECTHOL is a liquid internal antiseptic and "antipurulent," said to contain the active principles of echinacea and thuja.—Mfrs.: Lloyd Bros., Cincinnati, O.

EGGOSE is a food and nutritive consisting, according to Kochs, of a mixture of about equal parts of oatmeal (with a little wheat starch), sugar and cacao.—Mfr.: Dr. Lauser, Regensburg, Germany.

EGLATOL is said to consist of chloral hydrate, antipyrine, caffeine and carbamic acid menthyl ester. It occurs as a thick, clear liquid, soluble in alcohol, but only partly soluble in water (the menthyl compound separating). It acts as a hypnotic. Dose, 10 to 20 minims.—Mfr.: Dr. A. Horowitz, Berlin, Germany.

EGMOL is an egg emulsion of olive oil containing 40 per cent. of the latter.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

EGOLS are compounds defined by Gautrelet as ortho-nitrophenol-, cresol-, or thymol-para-sulphonates of mercury respectively, which are known as "phenegol," "cresegol," and "thymegol." See these headings.

EHRlich's NEW REMEDY FOR SYPHILIS, "606," is described under its chemical name, dioxydiaminoarsenobenzol.

EIFEL FANGO is a mineral mud found near the Neuenahr spa and employed similarly to the other and well-known fango mud of Battaglia in the form of local applications and as baths.

EIGOL is an alcoholic extract of tobacco which is exploited as a remedy for rheumatism.

EIGONS are a group of bromine and iodine compounds of albumin. Iodo-eigon, also known as "alpha-eigon," occurs as a light-brown, odorless and tasteless powder, containing 20 per cent. of iodine in chemical combination, and insoluble in water; it is used like iodoform externally. Pepto-iodo-eigon, also known as "beta-eigon," is a yellowish, odorless, nearly tasteless powder, containing 15 per cent. of iodine and soluble in water; it is intended as a substitute for the alkali iodides internally and is

given in similar doses. *Iodo-eigon-sodium* or sodium iodoalbuminate, is a yellowish, odorless, almost tasteless powder, containing 15 per cent. of iodine, and completely soluble in water, diluted alkalis or acids; it, too, was intended for internal use but has latterly been abandoned in favor of peptiodo-eigon. *Brom-eigon* is a compound of bromine with albumin, containing 11 per cent. of bromine; a whitish, almost odorless and tasteless powder, insoluble in water. It was employed chiefly as a dusting powder in ozena and other catarrh, and internally as a succedaneum for the alkali bromides; but it has latterly been practically superseded by *pepto-brom-eigon*, a whitish, faintly acid powder of peptone-like odor, soluble in water, and containing 11 per cent. of bromine. Dose, same as potassium bromide. *Eigon soap* contains 5 per cent. of eigon and is employed in eczema, erythema and other skin diseases.—Mfrs.: Chem. Fabrik Helfenberg, Helfenberg, Saxony; agts.: C. Reinschild Co., New York.

EKA-ODOFORM is powdered iodoform sterilized and kept sterile with 0.05 per cent. of paraformaldehyde. It is used as a vulnerary. (See caution under *formaldehyde*.)—Mfr.: E. Schering, Berlin; Schering & Glatz, New York.

EKTOGAN is a yellowish-white, odorless, tasteless powder, insoluble in water; it is essentially impure zinc peroxide (ZnO_2), giving off O on contact with wound-secretions and hence recommended as an antiseptic applied pure or as an ointment. It is also used for preparing H_2O_2 . It should be kept in glass-stoppered bottles.—Mfrs.: Kirchhoff & Neirath, Berlin N, Germany.

ELAN COTTON is absorbent cotton treated with tincture of capsicum. It is recommended as a rubefacient in place of capsicum plaster.—Mfr.: Geo. Hanning, Hamburg, Germany.

ELASTIN is a "liquid court-plaster" (probably flexible collodion) made by Dr. Stephan, Berlin SO.

ELAXOL is a laxative tablet said to contain as its active ingredients extract of cascara sagrada and phenolphthalein.

ELCHINA is a Swiss elixir of cinchona containing 0.32 per cent. of quinine, 2 per cent. of sodium glycerinophosphate, and 1 per cent. of tincture of nux vomica.

ELECTRARGOL, **ELECTRAUROL**, **ELECTROPLATINOL** and **ELECTROPALLADIOL** are colloidal metals prepared electrically and designed as bactericidal agents.

ELECTRON is said to be ozonized olive oil.

ELIXAFORM is a liquid alterative tonic said to contain in each fluid ram calcium formate 1 grain, sodium formate 3 grains, potassium formate $\frac{1}{2}$ grain and magnesium formate $\frac{1}{2}$ grain. It is incompatible with acids. Dose: $\frac{1}{2}$ to 1 fluid dram three times daily.

ELKOSSAN is a preparation obtained from the seeds of *brucea sumatrana* and is used as an antidyenteric and hemostatic. It is marketed as tablets, 6 to 8 of which constitute a daily dose.

ELYTRONES are antiseptic, astringent vaginal suppositories containing boroglyceride, hydrastine, thymoline, zinc sulphocarbolate and acetanilid. Formula B contains ichthyol in addition.—Mfrs.: Wm. S. Merrell Chem. Co., Cincinnati, O.

EMANOSAL is the new name recently applied to *radio-sal*, which see.—Mfrs.: Meister, Lucius & Brünig, Hoechst-on-M., Germany; agts.: V. Koechl & Co., New York.

EMBROCINUM MERCURIALE consists of 33 $\frac{1}{3}$ per cent. of mercury and 66 $\frac{2}{3}$ per cent. of a mixture of benzoinated lard and soap. It is employed as a local antisyphilitic.

EMBROZIN is a liniment said to consist of dried egg-albumin, powdered tragacanth, acetic acid, spirit of camphor, oil of turpentine, alcohol, and water.

EMENAH is "a liquid emmenagogue containing *cham-paca abromafastuosa* (?) ferrum, ruta and apiol," marketed in 4-oz. bottles.—Mfrs.: Pittsburg Physicians' Supply Co.

EMETINE (alkaloid) of the market is not a simple chemical but the total alkaloid of ipecac, consisting according to Dr. Paul of emetine proper and cephaeline. The emetic dose is 1/12 to 1/6 grain; the expectorant, 1/60 to 1/30 grain several times daily. Emetine *hydrochloride* (Paul), $C_{15}H_{21}NO_2 \cdot HCl$, is a white powder, soluble in water or alcohol, and sensitive to light. It is used mostly as an expectorant 1/12 to 1/6 grain per dose.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

EMODELLA is a name for an elixir of frangula.

EMODIN (*trihydroxymethyl-anthraquinone*), $C_{14}H_8O_5 \cdot CH_2(OH)_3$, is a reddish-yellow powder, soluble in alcohol and alkalis but insoluble in water. It acts as a cathartic in the dose of 1 $\frac{1}{2}$ grains best given in pills. It is the purgative principle of rhubarb and many other drugs.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

EMOL is a flesh-colored kind of stearite (a natural magnesium silicate chemically close to talcum) found in England, used as a vulnerary usually in the following combination: emol 7 grams, zinc oxide 3.5 grams, lanolin 15 grams, petrolatum 15 grams, glycerin 10 drops and solution of lead subacetate 10 drops.

EMOLLIENTINE is not an emollient, but an antiseptic and astringent ointment, consisting of aluminium hydrate, carbolic acid, isarol (ichthyol), lead oxide, corrosive sub-

limate, zinc oxide and the base. It is used in eczema, psoriasis, favus, pruritis and other skin diseases.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

EMPYROFORM is a condensation product of birch tar and formaldehyde; a dark grayish-brown, almost odorless powder, insoluble in water but soluble in chloroform. It is intended for use in place of tar in skin diseases, in 1 to 20 per cent. ointments, paints or liniments. An empyroform soap is also made, 5 per cent. and 10 per cent. (See caution under *formaldehyde*).—Mfr.: E. Schering, Berlin; agts.: Schering & Glatz, New York.

EMULGATES is the generic name applied to solid emulsions—triturations of oils, oleoresin of male fern, and other fluid drugs, with roborat (lecith albumin). The products contain 50 per cent. of roborat and 50 per cent. of the fluid medicament.—Mfr.: Dr. Leopold Sarason, Berlin, Germany.

ENDERMOL is a "compound of stearic acid anilide with hydrocarbons of the paraffin series"; a neutral, odorless ointment base, and claimed to be more readily absorbed than other ointment bases and to be non-irritating. *Endermol* should not be confounded with *eudermol*.—Mfr.: E. Schering, Berlin; agts.: Schering & Glatz, New York.

ENDOMENTOL is a 0.1 per cent. ointment of nicotine salicylate, recommended in scabies, and apparently similar to *eudermol*.

ENDOTIN is a Russian preparation representing tuberculin.

ENERGA is described as an "electrolytic" malt extract, and is exploited as a remedy in anemia. According to an analysis by Dr. Aufrecht, it consists of a mixture of 5 parts of hydrochloric acid, 5 parts of ferric chloride solution and 90 parts of extract of malt.—Mfrs.: Josty Bros., Charlottenburg, Germany.

ENERGETENES are fresh juices of various medicinal plants that are prepared (in France) without alcohol or heat and reported to contain the active principles in unaltered form. They occur as brownish liquids possessing the odor and taste of the respective plants and representing the latter c.c. for gram. *Convallaria*, *colchicum*, *digitalis* and *valerian* "energetènes" have been prepared.

ENERGIN is a nutrient consisting essentially of the proteins of rice; a fine, almost odorless and tasteless grayish-white powder, slightly soluble but swelling in water.

ENERGIN is also the name applied to tablets containing an emulsion of cod liver oil with calcium phosphate solidified with the aid of chocolate. Dose, 1 to 2 tablets three times daily.—Mfrs.: Energinwerke, Fünfkirchen, Hungary.

ENESOL is the fanciful name applied to what is defined as *mercury salicyl-arsinate*, obtained by the action of 1 molecule of methylarsinic acid on 1 molecule of basic mercury salicylate. It occurs as a white powder, soluble in about 25 parts of water, yielding solutions that do not give the usual reactions of arsenic or of mercury. It contains 38.46 per cent. of mercury, and 14.4 per cent. of arsenic, and was introduced by Dr. Goinet for hypodermic use in syphilis. Dose, 2 c.c. of a 3-per-cent. solution. Marketed in ampuls holding 2 c.c. of this solution.—Mfrs.: Clin & Co., Paris, France; agts.: E. Fougere & Co., New York.

ENNAN is a solid cresol soap containing 50 per cent. of cresol. It is marketed in tablets which are employed in solution as a surgical antiseptic and deodorant. Each tablet contains 0.5 gram of cresol.—Mfr.: F. Kümmel, Melsungen, Germany.

ENSEMIN is a dental local anesthetic, said to consist of a 1-per-cent. solution of cocaine hydrochloride with adrenalin chloride and a little chloretone.—Mfrs.: Fabrik "Rosenberg," Berlin, Germany.

ENTERIN is a compound of hexamethylenetetramine and proteid, intended as an intestinal disinfectant, particularly in typhoid fever. Dose, 10 to 20 grains. See caution under *formaldehyde*.

ENTERIN POEHL (*opocenterin*) is a yellowish-brown powder yielding a turbid solution with 100 parts of water. It is said to represent the synergistic group of the secretions contained in the mucosæ of the duodenum and jejunum free from toxins. It is put forward as a remedy in debilitated conditions of the pancreas, and in insufficient activity of Lieberkuhn's and Brunner's glands and of Peyer's patches.—Mfrs.: Dr. von Poehl & Sons, St. Petersburg, Russia; agts.: Lehn & Fink, New York.

ENTERINUM is an organic preparation of the jejunum and duodenum, occurring as a yellow powder and used in the treatment of digestive disorders.

ENTEROKINASE is a peculiar digestive ferment isolated by Powlow from the mucous membrane of the duodenum.

ENTEROL or ENTEROKRESOL is described as a mixture of the three isomeric cresols from coal tar oil, and hence would appear to be identical with *trikresol* (tricresol). A so-called *carbonate* of it has also been prepared.—Mfr.: E. Schering, Berlin, Germany; agts.: Schering & Glatz, New York.

ENTERONOL TABLETS are said by the makers to contain "ipecac, bismuth subnitrate, latalia radix, camphor, lupulin, caffeine and rheum." An analysis made in 1908 in the chemical laboratory of the American Medical Association revealed the presence of about 25 per cent. of alum; and an analysis made a year later

showed no appreciable amount of bismuth subnitrate or caffeine. The tablets are exploited as an intestinal astringent. It is reported that the same product is advertised to the laity under the name "cholerol."

ENTEROPHOR is a plaster bandage prepared at the instigation of Dr. A. Rose of New York and used to support the stomach in gastroptosis and as an abdominal supporter during pregnancy.—Mfrs.: P. Beiersdorf & Co., Hamburg; agts.: Lehn & Fink, New York.

ENTEROROSE is a dietetic recommended in diarrheas and gastric diseases. It is said to consist of vegetable albumin impregnated with a meat solution and containing diastase, and occurs as a yellowish powder that mixes well with water.—Mfrs.: Gesellschaft für diät. Präparate, Zurich, Switzerland.

ENWEKAIN (name formed from the German N W K) is the purified wool-fat marketed by the Norddeutsche Wollkammerei, Delmenhorst, Germany, and sold here by V. Koechl & Co., New York.

ENZYMOL is a "glycerino-aqueous acid extract prepared directly from the mucous membrane of the fresh animal stomach, free from alcohol but containing a trace of thymol and having an acidity equivalent to about 0.3 per cent. of combined hydrochloric acid. It contains no free hydrochloric acid, but does contain about 25 per cent of glycerin." Enzymol is a light straw-colored liquid, and is employed as a topical solvent of morbid tissue, and is said to have no effect on healthy, living tissue. It is used as an application to purulent and necrotic surfaces. It is made ready for use by the addition of $\frac{1}{2}$ to 2 volumes of water; for solution of necrotic bone it is used undiluted.—Mfrs.: Fairchild Bros. & Foster, New York.

EOSOL is a solution described as containing 50 per cent. of the isomeric cresols—thus apparently analogous to the official compound solution of cresol.—Mfrs.: V. E. Perryman & Co., Atlanta, Ga.

EOSOLATES are "a series of sulpho-acid salts of the aliphatic creosote esters," introduced by Dr. G. Wendt of Berlin and made by Joh. Lehmann, Berlin, Germany; agts.: Fischer Chem. Importing Co., New York. See *calcium eosolate* and *quinine eosolate*.

EOSOTE is the name applied to the so-called *creosote valerate*; a yellowish, oily liquid, of smoky-aromatic taste and odor; insoluble in water, readily soluble in alcohol or ether. It is used chiefly in phthisis, but to a limited extent also as a gastro-intestinal disinfectant. Dose, 3 to 10 minims three times a day, in capsules (0.2 gram), or in milk or alcoholic solution.—Mfr.: Joh. Lehmann, same as above.

EPHEDRINE HYDROCHLORIDE, $C_{10}H_{15}NO.HCl$, is the salt of the alkaloid of *ephedra vulgaris*; white needles,

readily soluble in water or alcohol, and employed in 10 per cent. solution as a mydriatic (1 or 2 drops per instillation).—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

EPHENIC ELIXIR is a liquid antipyretic, analgesic and nerve sedative, each fluid dram of which contains acetphenetidin $3\frac{1}{2}$ grains, sodium bicarbonate 1 grain, sodium bromide 1 grain, and caffeine $\frac{1}{2}$ grain. Dose, 1 to 2 teaspoonfuls.—Mfr.: Wm. F. Merrell Chem. Co., Cincinnati, O.

EPICARIN is the trade name applied to *beta-oxynaphtyl-ortho-oxymeta-toluylic acid*, $C_{18}H_{14}O_4$. The drug forms yellowish needles soluble in alcohol, ether, petrolatum or olive oil; insoluble in water, slightly soluble in chloroform. It is employed in parasitic skin diseases (scabies, herpes tonsurans, etc.), chiefly in ointments (15 to 20 per cent.), 10 per cent. solutions made with sodium carbonate, and in 10 to 15 per cent. alcoholic solutions. Solutions in other oils than olive, or in petrolatum and lanolin, can be made with the addition of a little ether. *Veterinary* epicarin is an impure grade intended for veterinary practice; a reddish-brown powder, used the same way as the medicinal quality.—Mfrs.: Farbenfabriken of Elberfeld (Germany) and New York.

EPIDERMIN is a name applied to two different preparations; one an ointment consisting of fluorpseudocumol (1), difluordiphenyl (4), anhydrous wool fat (85), and petrolatum (10), and used on wounds; the other is an ointment base composed of white wax, water, acacia, and glycerin.—Mfrs.: Valentiner & Schwarz, Leipzig, Germany; agts.: C. Bischoff & Co., New York.

EPILEPTICON is a hemoglobin-potassium bromide preparation marketed in the form of tablets.

EPILEPTIN Tablets are 15-grain tablets that are said to contain borax, zinc oxide, potassium bromide, sodium chloride, phenacetin, sodium lactate, pepsin, starch, sodium bromide, ammonium bromide and boric acid. As their name indicates, they are offered as an antiepileptic.—Mfrs.: Chem. Industrie und Handelsgesellschaft, Dresden A, Germany.

EPILEPTOL is an antiepileptic that is said to be similar chemically to amidofornic acid. It occurs as a liquid from which 4 per cent. of formaldehyde may be liberated. See caution under formaldehyde.—Mfrs.: Admiral-Apotheker, Berlin, Germany.

EPINEPHRINE (*dihydroxymethylaminoethylbenzene*), $C_6H_5(OH)_2(CHOH.CH_2NHCH_3)$, is a substance with feeble basic properties, obtained from the suprarenal gland of the sheep or other animal, or synthetically. It is easily soluble in acids, forming salts, of which the hydrochloride is readily soluble in water. Its incompatibles are the same as those of alkaloids. Epinephrine causes constrict-

tion of the blood vessels with consequent high rise of blood pressure; a stimulation of the vagus center with slowing of the heart; and a direct stimulation and toning of the heart similarly to digitalis. The effect of a single dose is very fleeting. The effects are seen on local application and intravenous and intramuscular injection. Dilute watery solutions of its salts rapidly lose their strength, the deterioration being accompanied by a reddish or brownish discoloration. It is used in the form of a solution of its hydrochloride, regularly marketed in 1:1000 strength. Dose, 5 to 20 minims of the latter solution every two or three hours; hypodermically, 3 to 15 minims. Locally the hydrochloride is used in solution varying in strength from 1:15000 to 1:1000 for ordinary applications; in oily solution for sprays; in ointment for application to mucous membranes. The article is marketed under numerous trade names, such as *adrenalin*, *adrenephrin*, *adrin*, *paranephrin*, *suprarenaline*, *suprarenine*, etc.

EPIOSIN is a derivative of morphigenin, occurring as transparent prisms that are easily soluble in alcohol or chloroform, but insoluble in ether or water, and used as an anodyne and sedative in doses of 1 to 2 grains.—Mfr.: Dr. Ad. Heinemann, Eberswalde, Germany.

EPIRENAN is a 1:1000 solution of a brand of the active principle of the suprarenal gland, which remedy is referred to fully under *epinephrine*.—Mfr.: Dr. Heinr. Byk Berlin NW, Germany.

EPOCOL is described as a creosote preparation occurring as a white powder which is readily soluble in water to form a solution having but a faint empyreumatic odor and taste. According to an analysis made by Dr. F. Zernik, it consists of sodium benzoate, ammonium sulphoguaicolate and sodium sulphoguaicolate.

ERASIN is a syrup of potassium guaiacol-sulphonate and ethylmorphine hydrochloride, made by Reichold & Co., St. Ludwig, Alsace.

ERGOGENINE (Joachim), in capsules and syrup, is exploited as a remedy in chlorosis, anemia, neurasthenia and the like. Nothing is stated concerning its formula.

ERGONE is a liquid preparation of ergot for internal or hypodermic use; 1 c.c. is said to represent 1 gram of ergot.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

ERGOTINA STYPTICA (Egger) is, according to L. Ha-jos, a fluid extract of ergot containing 5 per cent. of stypticin and recommended in disturbed cerebral circulation and in neuroses accompanying or following menstrual disturbances. Dose, 10 to 15 drops.

ERGOTININE CITRATE is a salt of a crystalline alkaloid derived from ergot. It is a grayish-white amorphous powder, slowly soluble in water. It is intended for hypo-

dermic use in place of the ordinary ergot preparations; given per os it has but little activity. It is employed mainly in the treatment of uterine hemorrhage and headaches. Dose, 1/200 to 1/100 grain per injection. Marketed as tablets each containing 1/200 grain.—Mfrs.: Burroughs, Wellcome & Co., London and New York.

ERGOTINOL is a hydrolyzed, dialyzed fluid extract of ergot, 1 c.c. of which is said to equal 0.5 gram of extract of ergot Ph. G. 1V. Dose, 3 to 10 minims.—Mfr.: Dr. A. Vosswinkel, Berlin W, Germany.

ERGOTOLE is a liquid preparation of ergot $2\frac{1}{2}$ times as strong as the U. S. P. fluid extract and used chiefly hypodermically. Dose, 5 to 20 minims.—Mfrs.: Sharp & Dohme, Baltimore, Md.

ERGOTOXINE CITRATE and HYDROCHLORIDE are now regarded as identical with *cornutine citrate* and *hydrochloride* respectively. They are prescribed as hemostatics and oxytocics in obstetrical practice; also in spermatorrhea. See *cornutine citrate*.—(Nonproprietary.)

ERICIN is stated to be identical with *mesotan*, which see.

ERICOLIN is a glucoside of *ledum palustre* (wild rosemary) and various other ericaceæ; a brown mass, soluble in water, and credited with astringent and tonic effects.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ERNAL is the name of a preparation used for producing carbonic acid baths.

ERNUTIN is "a preparation containing the active therapeutic principles of ergot, namely, the alkaloid ergotoxine and the organic base para-hydroxyphenylethylamine, in definite amount, and free from the paralytic and depressor principles associated with many ergot preparations. It occurs as a clear, pellucid liquid, pleasant and palatable for mouth administration, whilst its use hypodermically produces no irritation." It is used chiefly for the arrest of post-partum hemorrhage. Dose, by intramuscular injection (for rapid results), 5 to 10 minims, repeated in 20 minutes if required; by mouth, 30 to 60 minims every three hours after expulsion of the placenta. "Vaporole Ernutin" is an ampul of ernutin containing 10 minims.—Mfrs.: Burroughs, Wellcome & Co., London and New York.

EROSAN is a syrup of potassium sulphoguaiacolate, containing ethyl-morphine hydrochloride 0.3 gram, potassium sulphoguaiacolate 10 grams, 30 grams distilled water, syrup 105 grams and fluidextract orange-peel 5 grams.

EROSIN is a resinoid obtained from *chadamicum luteum*; a pale-yellow mass, soluble in water or alcohol, and reported to have diuretic, sedative and anthelmintic actions.

ERYSIMIN is a glucoside obtained from the seeds of *erysimum* and possessed of the physiologic properties of digitalin.

ERYTHROCYTIN is a nutritive and roborant prepared by a new process from the red corpuscles of the blood, and said to contain 30 per cent. of soluble albumin.—Mfr.: A. Swoboda, Vienna V, Austria.

ERYTHROL TETRANITRATE (*tetranitrol*; *nitrated erythrol*), $C_6H_5(NO_3)_4$, forms colorless leaflets, easily soluble in alcohol but insoluble in water, and exploding on percussion; hence marketed only as chocolate tablets ($\frac{1}{2}$ grain), 1 or 2 of which every 4 to 6 hours constitute the dose. It is a vaso-dilator and antispasmodic like nitroglycerin, but its action is slower and more lasting. It is thus used in angina pectoris, heart disease, etc.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ERYTHROPHLEINE HYDROCHLORIDE is the salt of the alkaloid of erythrophloeum guineense (sassy bark); a yellowish-white hygroscopic powder, soluble in water or alcohol, and employed as a local anesthetic (chiefly in eye diseases) in 1:2000 to 1:400 solutions and as a heart tonic (1/30 to 1/15 grain).—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ESANOFELE is an antimalarial in pill form, consisting of quinine hydrochloride, iron citrate, arsenous acid and a vegetable extract.—Mfrs.: Bisleri & Co., Milan, Italy.

ESCALIN is a remedy used by Dr. Klemperer in place of the usual bismuth subnitrate for arresting gastrointestinal hemorrhages and for cicatrizing gastric ulcers. It is a trituration of 2 parts of finely powdered aluminum with 1 part of glycerin, and is marketed as 0.25 gram pastilles.—Mfrs.: Ver. Chem. Werke, Charlottenburg, Germany; agts.: V. Koechl & Co., New York.

ESCATOL is "an oleaginous combination containing zinc chloride and salicylic acid," and employed as an antiseptic vulnerary and mild escharotic. It was introduced by the late Prof. Howe, who used three different strengths: single, double and quadruple; and the article is so marketed.—Mfr.: Lloyd Bros., Cincinnati, O.

ESCO-QUININE, also known as "neutral quinine escullinate, Flügge," is described as a compound of quinine with the glucosides of horse chestnut; a yellowish, amorphous, bitter powder containing 50 per cent. of quinine; insoluble in water but rendered soluble by acids. It is marketed in 0.1 gram sugar-coated tablets, one of which given three to five times daily constitutes the usual dose. It is used in coryza; colds in the respiratory tract; also as a nerve tonic.—Mfr.: Karl Engelhard, Frankfort-on-M., Germany.

ESCORCIN (*wescorcin*), $C_6H_5O_4$, is derived from esculetin, a cleavage product of esculin (from horse chestnut bark). It occurs as whitish, water-soluble crystals, and was recommended by Dr. Fröhlich for diagnosing corneal defects—1 or 2 drops of a 10 to 20 per cent. aqueous solution in-

stilled into the eye stains the lesions red.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ESCULIN (*polychrome, esculinic acid, bicolorin, enallathrom*) is a glucoside obtained from horse-chestnut bark (*esculus hippocastanum*), occurring as white, bitter crystals, soluble in water, alcohol or chloroform. Its solutions, particularly in the presence of alkali, show a strong bluish fluorescence. It has been used for years as an antiperiodic in doses of 5 to 15 grains, but has more recently been suggested as an aid to the treatment of lupus by the Finsen rays. Five minims of a 5 per cent. aqueous solution made with the aid of 2 or 3 per cent. of sodium carbonate are injected beneath the skin of the part about to be treated.—Mfr.: E. Merck, Darmstadt; agts.: Merck & Co., New York.

ESERIDINE, $C_{15}H_{25}N_3O_8$, is an alkaloid of calabar bean coexisting with eserine and calabarine. Its action is the same as that of eserine, but it is only one-sixth as powerful. It has been used in the form of its tartrate by hypodermic injection in diseases of the stomach of cattle. Dose (veterinary), 5 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ESERINE-PILOCARPINE is a simultaneously crystallized mixture of eserine salicylate and pilocarpine hydrochloride (1:2), occurring as a white powder, soluble in water and alcohol, and used as an anodyne and cathartic in colic of horses (3 to 6 grains per dose by injection).—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ESPERAGEN contains lecithin, condensed milk, phosphorus and iron.

ESTER-DERMASAN is a soft soap containing 10 per cent. of free salicylic acid besides 10 per cent. of salicylic acid esters of phenyl and benzoyl radicles. It is used topically in rheumatic affections, 5 to 10 grams per inunction.—Mfr.: Dr. Reiss, Berlin N, Germany.

ESTON and **FORMESTON** are two aluminum compounds, the former being *basic aluminum acetate*, $Al(OH)(C_2H_3O_2)_2 + aq$; the latter, *basic aluminum acetoformate*, $Al(OH)(HCO_2)(C_2H_3O_2) + aq$. They occur as fine, white powders, sparingly and slowly soluble in water, and permanent in the air and in light. They have a faintly acidulous odor. Under the influence of water or aqueous fluids (such as blood, pus, etc.), they gradually decompose into their components, and manifest the astringent and antiseptic action characterizing solution of aluminum acetate, combined with the drying effect of a porous powder. They are employed chiefly as dusting-powders (generally of 10 to 50 per cent. strength, seldom undiluted). *Peru-eston* and *peru-formeston* have been marketed. These latter occur as dry powders containing 10 per cent. of balsam of peru with 40 per cent. of eston or formeston respect-

ively and 50 per cent. of talc. It should be noted that the use of formaldehyde in any form or of compounds that may produce it involves a possibility of bad effect on eyesight. See *caution* under *formaldehyde*.—Mfr.: Dr. A. Friedländer, Berlin, Germany.

ESTORAL is defined as *boric acid menthol ester* obtained by the action of boron trichloride on menthol. The formula $\text{Bo}_3(\text{C}_{20}\text{H}_{18})_3$ has been assigned to it, and it occurs as a white, tasteless powder having a faint odor of menthol. It is practically insoluble in water and alcohol, but dissolves readily in chloroform and ether. It is offered as a remedy for use as a snuff in acute and chronic nasal catarrhs, and is supplied as a 50-per cent. lactose trituration under the name of *estorin*.—Mfrs.: Zimmer & Co., Frankfurt-on-M., Germany; agts.: C. Bischoff & Co., New York.

ETHACOL (*ethacol*) is a trade name for *monoethyl ether of pyrocatechin*, better known as and described herein under *guethol*.—Mfrs.: Kalle & Co., Biebrich-on-Rh.; agts.: Lehn & Fink, New York.

ETHER, CHLOROMETHYLMENTHYLIC.—See *forman*.

ETHER, GLYCERINO-SALICYLIC, is referred to under *glycosal*.

ETHER, HYDRIODIC, is the well-known *ethyl iodide*.

ETHER, HYDROBROMIC, is *ethyl bromide*.

ETHER, METHYL-DIIODOSALICYLIC, is better known as *sanoform*.

ETHER, SALICYLIC, was recently brought forward as a succedaneum for mesotan as a topical antirheumatic. It is clearly soluble in castor oil and olive oil.—Mfr.: Dr. A. Voswinkel, Berlin W, Germany.

ETHOL is a trade name for *cetyl alcohol*. See *alcohol cetyl*.—Mfrs.: C. A. F. Kahlbaum, Berlin, Germany; agts.: Eimer & Amend, New York.

ETHO-METHYL (*etho-methyl*) is a mixture of ethyl and methyl chlorides, used as a local anesthetic.—Mfrs.: Dr. Thilo & Co., Mayence, Germany.

ETHOMORPHINE is an English trade name for *ethylmorphine hydrochloride*, known on this market as *dionin*.

ETHOXYACETYL MENTHOL is a colorless liquid boiling at 153°C . and soluble in alcohol. Diluted alkalies decompose it into menthol and ethoxyacetic acid. It is credited with great therapeutic value.

ETHOXYCAFFEINE (*ethoxycaffeine*), $\text{C}_8\text{H}_9\text{OC}_2\text{H}_4\text{N}_2\text{O}_2$, is obtained by boiling monobrom-caffeine with an excess of alcoholic potassa solution, and forms white crystals, soluble in ether and hot alcohol. It is used in migraine and neuralgias, 4 grains several times daily in wafers.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ETHRIN is a new name for the dericin ointment originally known as *rhisan*. The salve contains 5 per cent. of "menthol-ethrol, a water-soluble menthol-dericin soap." It is applied to the nostrils with a brush in cases of coryza.

ETHRISIN is described under its chemical name *acetyl-salicylamide*.

ETHYL AMIDOBENZOATE is the name chosen for a Swiss analogue of *anæsthesin*.

ETHYLAMINOACETPYROCATECHIN HYDROCHLORIDE.—See *homorenon hydrochloride*.

ETHYL-AMYGDOPHENIN is the same as *amygdophenin*.

ETHYL BROMIDE (*monobromethane*; *hydrobromic ther*), C_2H_5Br , is a colorless or nearly colorless, inflammable volatile liquid, having a burning taste and chloroform-like odor, sp. gr. about 1.453 to 1.457; soluble in alcohol, chloroform or ether. It is employed as an inhalation anesthetic in minor surgery, and as a nerve sedative in epilepsy, hysteria, etc. Dose, by inhalation, 150 to 300 minims; by mouth, 5 to 10 drops on sugar or in capsules. On exposure it darkens from liberation of bromine; it should not be used when discolored.—(Nonproprietary.)

ETHYL CARBANILATE.—See *euphorine*.

ETHYL CHLORIDE (*monochlor-ethane*), C_2H_5Cl , is now official in the U. S. P., hence fully described in the latter work and other works of reference. It is also marketed under a number of trade names (*kelene*, *anodynone*, *anti-dolorin*, *ethylol*, etc.)

ETHYL-METHYL-XANTHINE is recommended by Dr. Birk as a cardiac diuretic in place of diuretin (theobromine-sodium and sodium salicylate). Dose, $7\frac{1}{2}$ to 15 grains five or six times daily.

ETHYL-MORPHINE HYDROCHLORIDE, $C_{17}H_{19}NO(OC_2H_5).HCl + H_2O$, occurs as a white, crystalline, odorless, slightly bitter powder. It is soluble in about 7 parts of water and in 2 parts of alcohol, insoluble in ether and chloroform. It is used mainly as a succedaneum for morphine, but also as a lymphagogue in corneal affections, iritis, etc. It is also known by the brand name, *dionin*. Dose, $\frac{1}{4}$ to 1 grain. Externally it is applied in 10 to 20 per cent. solutions or triturations.—(Nonproprietary.)

ETHYL-MORPHINE HYDRIODIDE (*iodide*) is analogous to ethyl-morphine hydrochloride in action and uses, but, it is claimed, causes less pain and leaves less visible and smaller cicatrices in the cornea. It is used mainly in corneal ulcers and opacities and in chronic trachoma.

ETHYL-NARCEINE HYDROCHLORIDE, also known in France by the trade name *narcyl*, has the formula $C_{22}H_{27}NO_8.HCl$. It occurs as silky, flossy prisms, readily soluble in alcohol or chloroform and soluble in about 120 parts

of water; slightly soluble in ether. Salts of benzoic, cinnamic and citric acid increase its aqueous solubility. It is used as a cough sedative and antispasmodic, in phthisis, asthma, whooping-cough, etc. Dose, $\frac{1}{2}$ to 1 grain, children proportionately.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ETHYL-PROPIONYL.—See *diethyl-ketone*.

ETHYL SALICYLATE (*salicylic ether*), $C_9H_{10}O_3$, is a transparent, colorless, volatile, oily liquid having a pleasant characteristic odor and taste. Its specific gravity at 20° C. is about 1.184. It is readily soluble in alcohol, insoluble in water. Ethyl salicylate has the same action as methyl salicylate and the salicylates in general. Dose, 5 to 15 minims three or four times a day, in capsules. (See also *sal-ethyl*.)—Mfrs.: E. Merck, Darmstadt, and others.

ETHYL SUBLIMATE.—See *mercury-ethyl chloride*.

ETHYLENE BROMIDE (*dibrom-ethane*), $CH_2Br.CH_2Br$, occurs as a slightly brownish, heavy liquid (sp. gr. 2.189), of chloroform odor, and soluble in alcohol. It is used as a nerve sedative in doses of 1 to 2 minims two or three times daily, in emulsion or capsules. It should be kept protected against light; and it should not be confounded with the relatively non-poisonous ethyl bromide.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ETHYLENEDIAMINE-MERCURY SULPHATE is described under *sublimine*.

ETHYLENEDIAMINE-SILVER PHOSPHATE.—See *argentamine*.

ETHYLENEDIAMINE-TRIKRESOL is better known as *kresamine*; see this.

ETHYLENE-IMINE is a synonym of *piperazine*.

ETHYLENE PERIODIDE (*tetraiodide*).—See *diiodoform*.

ETHYLOL is a trade name of *ethyl chloride*.—Mfr.: H. Goetz, Frankfort-on-M., Germany.

EUAROL is an ointment consisting of *aristol*, *europhen* and *petrolatum*.

EUBIOL is described as pure hemoglobin with the important salts and albumins of the blood; an odorless powder, soluble in water; and *eubiol liquid*, as a 1:1 solution of eubiol, in glycerin prepared in vacuo.—Mfr.: Henry Schweitzer, Hamburg, Germany.

EUBIOSE is defined as a concentrated glycerin-free hematogen rendered permanent by treatment with carbonic acid.—Mfrs.: Eubiose-Gesellschaft, Altona, Germany.

EUBORNYL is what a Swiss firm calls its *alphabrom-isovalerianic acid borneol ester*, a substance put forward for use in various nervous derangements.—Mfrs. Lüdy & Cie, Burgdorf, Switzerland.

EUCAINE, **BETA-EUCAINE**, or **EUCAINE HYDROCHLORIDE B**, is the *hydrochloride of trimethylbenzoorypiperidin*, having the formula $C_9H_7N(CH_3)_3(C_6H_4COO) \cdot HCl$. It occurs as a white, neutral powder, soluble in about 30 parts of cold water or alcohol. It is used like cocaine as a local anesthetic, and is claimed to be less toxic, and sterilizable by boiling without fear of decomposition. It does not dilate the pupil nor contract the blood vessels. It is applied mostly as 2 to 5 per cent. solutions, which are conveniently prepared in a test-tube with boiling water. It is also marketed as $1\frac{1}{2}$ and 5 grain tablets. *Alpha-eucaine* appears to have been withdrawn from the market.—Mfrs.: E. Schering, Berlin; agts.: Schering & Glatz, New York.

EUCAINE ACETATE is a new salt of the above mentioned base, differing from the preceding in that it is very freely soluble in water—1 in 3. In other respects, it is similar to eucaine.

EUCAINE LACTATE is another salt of the same base whose action and uses are the same as those of eucaine hydrochloride but used chiefly as a local anesthetic in eye practice. It is soluble in about 5 parts of water, 10 parts of alcohol and 5 parts of chloroform.

EUCALDIN is a local anodyne, and an internal antiseptic, antispasmodic, and antimalarial, prepared by the fractional distillation of oils of eucalyptus globulus and pinus sylvestris. Externally (in sciatica, sprains, rheumatic pains, etc.), it is applied pure, the part (if an extremity) being covered with rubber sheeting or a dampened towel. Dose, 10 to 20 minims in water, 3 or 4 times a day, or every half hour if necessary for four doses.—Mfrs.: Norwich Pharm. Co., Norwich, N. Y.

EUCALOIDS are gelatin capsules each containing 5 minims of oil of eucalyptus.—Mfrs.: E. G. Binz Co., Los Angeles, Cal.

EUCALYPTOL, chemically *eucalyptene hydrochloride*, is obtained from oil of eucalyptus and is intended to replace the latter as an internal antiseptic (gastrointestinal diseases, phthisis, etc.). It forms yellowish, hygroscopic crystals of camphoraceous odor and peculiar taste, and soluble in alcohol, ether, chloroform or oils. Dose, 20 to 30 grains per day, in capsules or wafers or as confection. *Eucalypteol* must not be confounded with the official *eucalyptol*.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

EUCALYPTINE (Le Brun) is an emerald-green, clear oil, said to be an oily extract of eucalyptus globulus containing some gualacol and iodoform. It is intended for subcutaneous injection into the lumbar region or gluteal muscles, in cases of influenza, whooping-cough, erysipelas, puerperal fever, etc. Dose, 15 to 30 minims; children, 4 to 12 minims.

EUCALYPTOL-ODOFORM is a 5 per cent. solution of iodoform in eucalyptol.—(Nonproprietary.)

EUCAMENTWATTE (eucament cotton) is cotton impregnated with menthol and oil of eucalyptus. It is proposed for the treatment of rhinitis.

EUCA-MUL is an emulsion of oil of eucalyptus in glycerin and honey, said to contain in each fluidounce 15 minims of the oil.—Mfrs.: E. G. Binz Co., Los Angeles, Cal.

EUCAPREN (*eucaresalin*) is a 1 per cent. solution of beta-eucaine lactate in 1:5000 solution of suprarenalin. It is employed as a local anesthetic and vaso-constrictor in operations on the eye, ear, nose and throat, and in minor operations in general.—Mfrs.: Armour & Co., Chicago, Ill.

EUCASIN or *casein-ammonia* is a nutritive recommended in anemia, gout, gastric and lung diseases. Dose, a tablespoonful two to four times daily in soup, etc.—Mfrs.: Majert & Evers, Grünau, Germany; agts.: Fuerst Bros., New York.

EUCASOL.—See under *anytin*.

EUCATHYMIN is a whooping cough remedy containing the active constituents of *thymus vulgaris*, *thymus serpyllum* and *eucalyptus globulus*.—Mfr.: Dr. Heinrich Halle, Berlin N, Germany.

EUCERIN ANHYDROUS is what Unna calls a mixture of 5 parts of the oxycholesterin group separated from wool-fat and 95 parts of petrolatum. Mixed with an equal part of water it yields *eucerin hydrous*. The latter is said to keep indefinitely, and to be miscible in the cold with other ointments or pastes. Eucerin cold-cream, prepared from eucerin and rose water, Unna considers far preferable to the official article, because its soft consistence is always the same on its surface as well as in its interior, in a cold as well as in a warm place.—Mfrs.: Schwanenapotheke, Hamburg, Germany.

EUCHINAL is what L. Dokkum calls the carboxy-ethyl ester of quinetum (a natural mixture of the cinchona alkaloids). It is intended as a "bitterless quinine."

EUCHININ.—See *euquinine*.

EUCODINE ("*eukodin*," *codeine methylbromide*, *codeine brommethyle*), $C_{16}H_{21}NO_3(BrCH_3)$, occurs as colorless crystals melting at 261° C. and readily soluble in water. It is offered as a less toxic succedaneum for codeine in all its uses. Dose, 3 to 6 grains per day, in solution.—Mfrs.: J. D. Riedel Co., Berlin and New York.

EUCOL is what Dr. G. Biscaro has named *guaiacol acetate* or *acetic acid ester of guaiacol* $C_6H_4.OCH_3.O.CH_2.CO$. The article occurs as a colorless liquid of a specific gravity of about 1.138, of a guaiacol odor and boiling with partial decomposition at 235° to 240° C. It is soluble in all pro-

portions in alcohol and in 5 parts of almond oil. It is intended for use as a readily assimilable compound of gualacol that may be employed per os or subcutaneously.—Mfr.: Carlo Erba, Milan, Italy.

EUDERMOL is the name applied to *nicotine salicylate*, which forms colorless crystals soluble in water and alcohol and of a faint empyreumatic odor. It is used as a 0.1 per cent. ointment in scabies, and as a 1 per cent. ointment in veterinary practice (*sarcoptes mange*). *Eudermol* should not be confounded with the ointment base *endermol*.—Mfr.: Dr. L. C. Marquadt, Beuel, Germany.

EUDOXINE is the bismuth salt of *nosophen* (teraiodophenolphthalein), *bismuth nosophenate*, occurring as a reddish-brown, odorless, tasteless powder, insoluble in water and employed as an intestinal antiseptic and astringent in doses (adult) of 5 to 15 grains 3 to 5 times daily.—Mfrs.: Chem. Fabrik. "Rhenania," Aix-la-Chapelle, Germany; agts.: Merck & Co., New York.

EUDRENINE is a local anesthetic marketed in capsules of 0.5 c.c., containing 1/12 grain of *eucaine* and 1/4000 grain of *adrenalin hydrochloride*. It is used as a local anesthetic, chiefly in dentistry. The contents of one or two capsules, according to the number of teeth to be extracted, are injected into the gums ten minutes before extracting.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

EUFERIN is a compound syrup of thyme, used chiefly in whooping-cough and chronic bronchial affections. It is supplied also in *arseniated* form.—Mfr.: V. Lassak, Bad Sängenberg, Germany.

EUFERROL is a preparation of gelatinous consistence, marketed in capsules the contents of which are said to represent 0.012 gram of iron in ferrous combination and 0.00006 gram of *arsenous acid*, thus corresponding in composition to a tablespoonful of the stronger *Levico water*. It is said to be odorless, tasteless and permanent, and it has been introduced as a convenient substitute for *Levico water* which is put forward as an alterative and *hematinic*.—Mfrs.: J. D. Riedel Co., Berlin (Germany) and New York.

EUFORMOL is a liquid antiseptic containing as the active ingredients oil of *eucalyptus*, oil of *wintergreen*, *thymol*, *menthol*, *boric acid*, fluid extract of wild indigo, and *formaldehyde* solution. It is used diluted with two to ten parts of water. See caution under *formaldehyde*.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

EUGALLOL is defined chemically as *pyrogallol monoacetate*. It is marketed only in 66 per cent. solution in acetone, which is a dark-yellow, syrupy liquid soluble in water and acetone and intended as a *succedaneum* for *pyrogallie acid* in *psoriasis*, etc. It is usually applied pure, once daily, followed in half an hour by *zinc oxide*

powder or paste.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

EUGASTROL TABLETS are exploited as a remedy for a disordered stomach, and to improve digestion. They are said to contain bismuth subnitrate, rhubarb, magnesium peroxide, ginger and oil of peppermint.

EUGENOFORM (*eugenol-carbinol-sodium*) occurs as colorless crystals, readily soluble in water but sparingly so in alcohol. It is prescribed as an intestinal disinfectant. 8 to 15 grains twice a day.

EUGENOLACETAMIDE, $\text{CH}_3\text{C}_6\text{H}_4\text{OCH}_2\text{OCH}_2\text{CONH}_2$, occurs as glistening scales melting at about 110°C . It is used in powdered form as a local anesthetic for mucous membranes and as a wound antiseptic with anesthetic properties.

EUGENOL BENZOATE is described under *benzo-eugenol*.

EUGENOL CINNAMIC ESTER or **EUGENOL CINNAMATE**.—See *cinnamyl-eugenol*.

EUGENOL IODIDE.—See *iodo-eugenol*.

EUGOL is an English liquid antiseptic consisting essentially of beta-naphthol, eucalyptol, salol, menthol, boric acid, extract of witchhazel and formaldehyde. See caution under *formaldehyde*.

EUGUFORM is partly *acetylated methylene-diguaiacol*; a grayish-white, nearly odorless powder, insoluble in water, and used as a dusting-powder or 5 to 10 per cent. ointments on wounds, burns, etc. *Soluble euguform* is a 50 per cent. solution of euguform in acetone, and is applied pure, or as paste or ointment. (See caution under *formaldehyde*).—Mfrs.: Chem. Fabrik. Güstrow, Germany; agts.: Lehn & Fink, New York.

EUHEMOSE (*euhamose*) is a fluid nutritive and roborant derived from blood.—Mfrs.: Kohrs & Co., Nachf., Hamburg, Germany.

EUKINASE is a digestive ferment isolated by Hallion and Carrion from the duodenum of the pig as a yellow powder, and recommended in intestinal indigestion. *Pancreatokinase* is a mixture of eukinase with pancreatin and intended to be used in cases where pancreatin was hitherto employed. Both products are marketed in hardened gelatin capsules that pass the stomach unacted upon. The hardening is probably done by formaldehyde. See caution regarding this latter substance in the description of *formaldehyde* elsewhere in this book.

EUKODIN.—See *eucodine*.

EULACTOL is described as a pulverulent nutrient prepared from milk and vegetable albumin, "containing all the nutritive substances necessary to life in the rational proportions."—Mfrs. Nährmittelwerke, Cologne, Germany.

EULATIN is defined as *dimethylphenylpyrazolone (anti-pyrine) amidobromobenzoate*, and occurs as a white, almost odorless powder of slightly acidulous taste. It is put forward as a remedy mainly in whooping-cough. Dose, $1\frac{1}{2}$ to $7\frac{1}{2}$ grains three or four times daily.—Mfrs.: Chem. Institute Dr. L. Oestreicher, Berlin, Germany.

EULAXANS is described as a chemical compound of 1 molecule of phenolphthalein and 2 molecules of sodium hydroxide; introduced by Prof. Vamossy as a laxative. It is marketed in sugar-coated tablets.—Mfrs.: G. Hell & Co., Troppau, Austria.

EULYPTOL (*ulyptol*) is an antifermentative remedy consisting of salicylic acid, carbolic acid and eucalyptus oil.

EUMAN is an antitoxic serum for use in the so-called Grips' swine plague, and is intended as a remedy not only for the disease named but also for pneumonia in calves, serving both as a prophylactic and a curative.—Mfrs.: Reute-Enoch, Hamburg, Germany.

EUMENOL is the trade name applied to the fluid extract of the root of tang-kui, kau-kui, man-mu, or schanki, a Chinese araliacea. It is employed as an emmenagogue and uterine sedative, particularly in nervous amenorrhea and dysmenorrhea. Dose, 1 fluid dram three times daily in sweetened water.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

EUMICTIN is the fanciful name given to hard capsules containing salol, santalol and hexamethylenamine, and exploited as a gonorrhea remedy. See caution regarding methylene compounds under *formaldehyde*.

EUMORPHOL is an antimorphine serum introduced by Dr. Hirschlaff for use in the treatment of morphine poisoning and morphinomania.—Mfrs.: J. D. Riedel & Co., Berlin and New York.

EUMYDRIN is the trade name applied to *atropine methylnitrate* or *methylatropine nitrate*, of the formula $C_{18}H_{26}O_6N_2$. It occurs as a white, crystalline, odorless, permanent powder, readily soluble in water or alcohol but sparingly soluble in ether or chloroform. Eumydrin is a mydriatic and antihydrotic like atropine sulphate. It is claimed that it dilates the pupil more quickly than atropine and that the dilatation is of shorter duration, being intermediate in these respects between atropine and homatropine. It is stated to be particularly useful in night sweats, whooping-cough and enuresis. Dose, as an antihydrotic, etc., $1/60$ to $1/24$ grain. Externally, as a mydriatic, it is used in solutions about one-tenth stronger than the usual atropine solutions.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

EUNATROL is a trade name for *sodium oleate*. It is marketed only as chocolate-coated pills (0.25 gram), 4 of

which are taken twice daily.—Mfrs.: Zimmer & Co., Frankfort-on-M., agts.: C. Bischoff & Co., New York.

EUNOL, ALPHA- AND BETA-, are described as condensation products of alpha- and beta-naphtol respectively, with eucalyptol. They occur as crystalline substances, having a strong, aromatic odor, and an intensely bitter taste. They are soluble in alcohol, ether, chloroform or olive oil; insoluble in water. They are intended as wound antiseptics and dermics.—Mfr.: Dr. G. F. Henning, Berlin S. W., Germany.

EUPHENOL is defined as "a combination of the antiseptic principles of thyme, Japanese peppermint, eucalyptus and baptisia tinctoria, with benzoboric acid, salicylic acid and oil of gualtheria."—Mfrs.: Fraser & Co., New York.

EUPHERIN is a polypharmaceutical preparation exploited as a remedy in diseases of the respiratory organs. Each teaspoonful is said to represent 0.4 gram of sodium guaicol-sulphonate, 0.4 gram of sodium glycerophosphate 50 per cent., 0.6 gram of fluidextract of thyme, 0.008 gram of cinnamic acid, and 0.0025 gram of arsenous acid. It is also marketed without arsenic.—Mfrs.: Dr. Friedr. Kolt-scharsch & Cie, Wiener-Neustadt, Austria.

EUPHORBIA PEPLUS is recommended by Dr. Artault as a remedy in bronchial asthma and chronic bronchial catarrh. It is administered in decoction, aqueous extract or tincture.

EUPHORINE (*phenyl-urethane; phenyl-ethylurethane; phenyl-ethyl carbamate; ethyl carbanilate*), $\text{CO}(\text{NH}.\text{C}_6\text{H}_5)(\text{OC}_2\text{H}_5)$, forms a white, faintly odorous powder, of clove taste, soluble in alcohol or ether, almost insoluble in water. It is prescribed as an analgesic and antiseptic—externally as dusting-powder on wounds, etc.; internally in rheumatism, sciatica, etc., in the dose of 8 to 15 grains two or three times daily. Incompatible on trituration with camphor, monobromated camphor, carbolic acid, chloral hydrate, menthol, resorcin, salol, thymol, and urethane. Euphorine should not be confounded with euphorben.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

EUPHTHALMIN is *tetramethyl mandeloxypiperidine hydrochloride*, $\text{C}_{17}\text{H}_{25}\text{NO}_3.\text{HCl}$, a white powder readily soluble in water or alcohol. It is used as a mydriatic in 2 to 10 per cent. solutions; its effects pass away quickly.—Mfr.: E. Schering, Berlin; agts.: Schering & Glatz, New York.

EUPHYLLIN is a new, water-soluble diuretic, said to consist of theophyllin and ethylenediamine. It occurs as a crystalline solid representing 78 per cent. of theophyllin (theocine), administered per os, per rectum, or by intramuscular injection, and is accordingly marketed as

powder, suppositories and sterilized solution.—Mfr.: Dr. Heinr. Byk, Charlottenburg, Germany.

EUPICIN is said to be a compound of the active constituents of pine tar and formaldehyde. See *caution* under formaldehyde.

EUPNEIN ELIXIR is said to contain in each 100 c.c. heroin 0.0325 gram, terpin hydrate 1.625 grams, creosote 3.75 grams, in a menstruum containing 30 per cent. of alcohol, with glycerin and aromatic essential oils. It is used as a cough and dyspepsia remedy. Dose, 2 fluid drams.—Mfrs.: Schieffelin & Co., New York.

EUPNEUMA, offered as an asthma remedy, is said to contain the active principles of stramonium, with anesthetic, subcutin and methylatropine bromide. It is used by insufflation.—Dr. E. Ritsert, Frankfort-on-M., Germany; agts.: Schering & Glatz, New York.

EUPORPHIN is the fanciful name applied to *apomorphine bromomethylate* or *methylbromide*, obtained by methylating morphine with dimethyl sulphate, and treating the resulting methylsulphate with a saturated solution of potassium bromide. It occurs as colorless needles or scales, easily soluble in water or alcohol. It is intended to supersede apomorphine hydrochloride, especially as an expectorant. Its solutions are claimed to be more permanent to air and light, though also sensitive thereto. Dose, 1/24 to 1/12 grain several times daily. Marketed also as 1/12 grain tablets.—Mfrs.: J. D. Riedel Co., Berlin and New York.

EUPRAXIN is said to contain aromatic extracts, lecithin and chocolate.

EUPROTANS are dry albuminous nutritives prepared from blood. An *alpha*-euprotan and a *beta*-euprotan are marketed, the former, owing to its cheapness, being recommended especially for hospitals and dispensaries.—Mfr.: Dr. A. Jolles, Berlin, Germany.

EUPYRINE (*vanillin-ethyl-carbonate-para-phenetidin*) occurs as greenish-yellow, tasteless needles of vanilla odor, readily soluble in alcohol, ether or chloroform, slightly so in water. It is a mild antipyretic, used especially in children and weak subjects. Dose (adult), 15 to 30 grains; for children, 5 to 15 grains.—Mfrs.: Zimmer & Co., Frankfort-on-M.; agts.: C. Bischoff & Co., New York.

EUQUININE is chemically *quinine carbonic ether* or *quinine ethylcarbonate*, $C_{23}H_{28}O_4N_2$, and occurs as light, white, fleecy, practically tasteless conglomerations of needles; readily soluble in alcohol, ether, or chloroform; sparingly soluble in water. Its solutions are bitter. It is recommended as a complete substitute for ordinary quinine, less apt to produce cinchonism and other disturbances. Dose, same as of quinine sulphate, in plain powder or as tablets.—Mfrs.: Zimmer & Co., Frankfort-on-M.; agts.: Merck & Co., New York.

EUQUININE HYDRIODATE is obtained by carefully and slowly pouring a solution of sodium iodide into an aqueous solution of euquinine (made with the aid of lactic, citric or acetic acid). It occurs as white crystals that are sparingly soluble in water but more readily soluble in alcohol and turn yellow when exposed to a damp atmosphere. It is intended to serve in place of the much vaunted (in France) combination of alkali iodides with euquinine.—Mfrs.: Zimmer & Co., Frankfort-on-M., Germany; agts.: C. Bischoff & Co., New York.

EUQUININE SALICYLATE contains about 74 per cent. of euquinine, has a melting-point of 195° C., and is intended for use in place of quinine salicylate in children.—Mfrs.: Zimmer & Co., Frankfort-on-M., Germany; agts.: C. Bischoff & Co., New York.

EURESOL is *resorcin monoacetate*, $C_8H_8O_3$; a yellow, honey-like, oily liquid of pleasant odor, readily soluble in acetone. It is employed in place of resorcin in skin diseases in 5 to 20 per cent. ointments or acetone-solutions.—Mfrs.: Knoll & Co., Ludwigshafen-on-Rh. and New York.

EURICINOL is a castor oil emulsion said to contain 80 per cent. of castor oil.

EURIGEN, a preparation for the treatment of frost bites, is said to contain besides other indifferent ingredients 10 per cent. of camphor, 2.5 per cent. of menthol and 6 per cent. of iodine.

EUROBIN is *chrysarobin triacetate*, introduced as a succedaneum for chrysarobin in dermatology. It forms a reddish-yellow powder, insoluble in water but soluble in chloroform, acetone, or ether. It is used in 2 to 20 per cent. solutions, which do not stain linen.—Mfrs.: Knoll & Co., as preceding.

EUROPHEN is defined as *diisobutyl-cresol iodide* or *iodo-diisobutyl-orthocresol*, and occurs as a bulky, yellow powder of faint saffron odor, and containing 28 per cent. of iodine. Soluble in alcohol, ether, chloroform and fixed oils; insoluble in water. It is employed mainly as a wound antiseptic like iodoform, as dry powder, ointment, etc. It has been occasionally used by injection in syphilis, $\frac{1}{4}$ to $1\frac{1}{2}$ grains once daily in oil, internally, 3 to 5 grains per dose. It should not be dispensed with starch, metallic oxides (zinc and mercury in particular), and mercurials, as decomposition is liable to ensue; and it should be protected from light, heat and moisture.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

EURYTHROL is a soft extract of ox spleen, employed in anemia and chlorosis. Dose, daily 1 to 2 teaspoonfuls in bouillon or soup.—Mfrs.: Landshoff & Meyer, Grünau, Germany.

EUSCOPOL is a trade name for its scopolamine hydrobromide.—Mfrs.: J. D. Riedel Co., Berlin and New York.

EUSEMINE is a sterile solution in hermetically sealed vials of cocaine, hydrochloride 0.0075 gram and adrenalin hydrochloride 0.00005 gram, dissolved in 1 c.c. of physiologic salt solution.—Mfr.: L. A. Seltzer, Detroit, Mich.

EUSOMA is a reddish-brown liquid of faint odor and pungent taste, said to contain in each fluid dram the principles of 15 grains of *echinacea angustifolia*, 2 grains of *thuja occidentalis*, and 4 grains of *baptisia tinctoria*. It is used as an antiseptic and alterative externally and internally. Dose, a teaspoonful three to six times daily.—Mfrs.: Eusoma Pharm. Co., Cincinnati, O.

EUSTENIN is the double-salt *theobromine-sodium* and *sodium iodide* of the composition $C_7H_7N_4O_2Na.NaI$. It contains about 51 per cent. of theobromine, and occurs as a white hygroscopic powder that is readily soluble in water. Dr. N. Jagic has employed it with alleged success in arteriosclerosis, angina pectoris and aortic aneurism.—Mfrs.: Zimmer & Co., Frankfurt-on-M., Germany; agts.: C. Bischoff & Co., New York.

EUTANNIN is an aromatic, unsaturated oxy-acid closely related to tannic acid. According to Thoms, it may be regarded as *chebulinic acid*, $C_{22}H_{22}O_{12}$. It is readily soluble in alcohol, insoluble in cold water and acidulated liquids, but soluble with decomposition (tannin being liberated) in alkaline solutions. It is used as an intestinal astringent in diarrhea of various origins. It is marketed mixed with an equal part of milk sugar, the dose of which trituration is 5 to 10 grains three or four times a day.—Mfrs.: Fogtenberger & Foehr, Fenerbach, near Stuttgart, Germany.

EUTERPEN.—See under *nebulates*.

EUTHYMOL is similar to euformol, but contains no formaldehyde.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

EUTONICIN is a compound elixir of condurango, containing besides condurango, cinchona, gentian, rhubarb, orange peel and 0.6 per cent. of organic iron, 0.1 per cent. of manganese and some peptone. It is exploited as a hematinic tonic and stomachic.—Mfr.: R. Rudolphson, Berlin W, Germany.

EUZON is a trade name for tablets of *sodium perborate*.—Mfr.: E. Schering, Berlin, Germany; agts.: Schering & Glatz, New York.

EUZONE is an alkaline, liquid antiseptic consisting of eucalyptol, thymol, menthol, sodium bicarbonate, sodium benzoate, oil of wintergreen, glycerin and vehicle; a pale-orange fluid, of agreeable odor and taste. It is employed topically pure or diluted with from one to four parts of water; internally, a teaspoonful every hour or two. This reparation should not be confounded with "euzon," a tablet of sodium perborate described above.—Mfrs.: Girard Co., Philadelphia, Pa.

EXALGIN is *methyl-acetanilid* or *methyl-phenyl-acetamid*, $C_9H_9N.CH_3.COCH_3$, white crystals, soluble in alcohol, sparingly soluble in water. It is prescribed chiefly as an anti-neuralgic, in doses of 2 to 5 grains. Maximum dose, 8 grains.—Mfrs.: McKesson & Robbins, New York.

EXODIN is the trade name for a mixture of derivatives of rufgallig acid. The drug occurs as a yellow, odorless, tasteless powder; insoluble in water. It was introduced by Prof. W. Ebstein of Göttingen as a laxative. Dose, 15 to 23 grains; children usually $7\frac{1}{2}$ grains. Marketed also as $7\frac{1}{2}$ grain tablets, which are best taken disintegrated in water. Exodin should not be confounded with exodyne, a mixture of acetanilid, sodium bicarbonate and sodium salicylate.—Mfr.: E. Schering, Berlin; agts.: Schering & Glatz, New York.

EXODYNE is said to be a mixture consisting of 90 parts of acetanilid, 5 parts of sodium bicarbonate and 5 parts of sodium salicylate. It is used as an antipyretic and analgesic. Dose, 4 to 8 grains.

EXTRACT RED BONE-MARROW is a brownish-red liquid of an agreeable aromatic taste; it contains about 2 per cent. of proteids, about 0.1 per cent. of lecithin and about 85 per cent. of glycerin. It is used in simple and pernicious anemias. Dose, 1 to 2 fluid drams three times daily, in water, milk or wine.—Mfrs.: Armour & Co., Chicago, Ill.

EXTRACTS.—A few extracts that have been introduced in recent years will be here briefly mentioned. *Arenaria*—from *arenaria rubra*; used in bladder troubles, 30 grains every three hours in sweetened water. *Aspidium spinulosum* (common wood-fern)—an ethereal extract employed as a tapeworm remedy in doses of 1 dram after fasting and followed in a few hours by a cathartic. *Dichondra brevifolia*, said to have proved a good remedy in diphtheria. One part of the extract is dissolved in three parts of glycerin, and a tuft of cotton is impregnated with this solution and gently brushed over the pseudo-membrane every two to six hours, according to the severity of the case. According to Dr. Aramian, this extract destroys the diphtheria bacilli and may be employed in conjunction with antitoxin. *Erodium*—from *erodium cicutarium*, used as a uterine hemostatic; dose, 2 to 5 grains every two or three hours, as pills or solution. *Galega officinalis* (goat's-rue)—a galactagogue in doses of 8 to 30 grains two to four times daily in syrup, mixture or pastilles. *Glaucium luteum*, fluid— $\frac{1}{2}$ to 1 teaspoonful three times a day in diabetes. *Periploca* (climbing dog's-bane), fluid—used as heart tonic; dose, 5 to 10 drops. *Psidium pyrtiferum* (guava; djamboe), fluid—employed as an intestinal astringent and hemostatic, 15 to 30 minims in water every two hours. *Sorbus acuparia*, fluid—prescribed as a laxative; dose, 30 to 240 minims two hours after a meal.

Suprarenal capsule, hemostatic—brown particles soluble in water with turbidity, and employed as vasoconstrictor topically (10 to 30 per cent. solutions), hypodermically, or intravenously; dose, 1 to 2 drams of 1 per cent. solution.

EXTRACT THYME, SACCHARATED. See *pertussin*.

EXUDOL is "an ointment consisting of ichthyol, green soap and analgesics."—Mfrs.: Fritz, Petzold & Süß, Vienna I, Austria.

EXURGINE is a laxative containing as its active ingredient phenolphthalein. Marketed by C. Bischoff & Co., New York.

F

FAGACID is a substance isolated from beech tar, of pitch-like structure and color, acid reaction, soluble in alkali solutions forming salts therewith, soluble in water, but not in alcohol, and possessing antiseptic properties. It is intended for an internal antiseptic; but it is also used in soaps, plasters, dietetic products (cacao), etc.—Mfr.: Dr. H. Noerdlinger, Floersheim, Germany.

FAGULINE is said to be essentially a solution of 15 parts of paraguaiacolsulphonate of potassium, 1 part of potassium sulphate and 48 parts of sugar, in 36 parts of 36.5 per cent. alcohol. It is offered as an antitubercular and anticatarrhal. Dose, a teaspoonful three or four times daily.—Mfrs.: Verweij & Co., Tiel, Holland.

FAGUSOL is defined as a salt of guaiacol. It occurs as a pink, odorless, crystalline powder, of mild bitter-acrid taste, soluble in water and diluted alcohol, insoluble in ether. It appears to be potassium guaiacol-sulphonate (thiocol) colored red. It is used in tuberculosis and chronic bronchitis chiefly, but also in gastro-intestinal fermentation. Dose, 5 to 10 grains three or four times daily, in capsules, solution or powders.—Mfrs.: American Medical Supply Co., Brooklyn, N. Y.

FALCOGEN is said to contain 10 per cent. each of thyme extract and beef extract, 65 per cent. of aromatic elixir and 15 per cent. of "quinguaiacol hypophosphite." The latter constituent is stated to contain 70 per cent. of guaiacol.—Mfrs.: Laboratorium Falk, Budapest, Hungary.

FANGO or "Mineral Liniment" is the mud of the hot springs at Battaglia, Italy. It is applied as it is or as baths in rheumatism and female complaints.—Mfrs.: Fango-Versand von Fränkel, Berlin, Germany; agts.: Fango Institute, New York.

FARASE is a dry serum intended to immunize horses against glanders.—Mfr.: E. Schering, Berlin, Germany.

FAREOL put forward for the treatment of chlorosis is said to contain 7 per cent. of iron.

FASCOL is a bituminous mineral consisting of calcium oxide, carbonic acid, ferrous oxide, silica, nitrogen and sulphur. It is marketed only as 1.25 gram hemorrhoidal capsules containing besides fascol, resorcin, bismuth subgallate, senna, olive oil, wool-fat, and althea ointment.—Mfr.: Otto Hütter, Cologne, Germany; agts.: German Fascol Works, St. Louis, Mo.

FASCOLUM PULVERATUM is prepared from bituminous slate and is put forward for the treatment of eczema, intestinal catarrh, hemorrhoids, etc. It is marketed in the form of suppositories and tablets.

FEBRISOL is an analgesic and antipyretic, of which "every 5 grains represent phenacetine 2 grains, salol $\frac{1}{2}$ grain, citrated caffeine $\frac{1}{2}$ grain, acetanilid, $1\frac{1}{4}$ grains, tartaric acid and sodium bicarbonate q.s." Dose, 5 to 10 grains. *Liquid* febrisol contains in each fluid dram these same ingredients and quantities.—Mfrs.: Tilden Co., New Lebanon, N. Y.

FEIGOL consists, according to the manufacturer, of 60 parts of extract of frangula and figs, 19 parts each of compound syrup of senna and syrup of peppermint and 2 parts of aromatic elixir. It is exploited as a laxative.—Mfr.: Chem. Fabrik. Fr. Schultz, Leipsic, Germany.

FELLITIN is described as a nearly odorless, neutral, medicinal soap, prepared from purified ox gall and used in frostbite.—Mfr.: Karl Töllner, Berlin, Germany.

FENCHYVAL is the trade name adopted for the isovalerianic ester of fennel oil, or *fenchyl isovalerianate*. The article occurs as a nearly tasteless liquid of faint valerian-like odor, its specific gravity at 15° C. is 0.945. It is employed as a nerve sedative in hysteria, vertigo, etc.—Mfr.: Anthony Deppe Sons, Hamburg-Billwärder, Germany.

FENOLUXINE is a laxative tablet the active ingredient of which is penolphthalein $1\frac{1}{2}$ grains.—Mfrs.: Feno Chem. Co., New York.

FENTHOZONE is an English disinfectant consisting essentially of acetic acid 26 parts, carbolic acid 2 parts, menthol, camphor, and oil of eucalyptus of each 1 part, and 0.5 part each of lavender and vervain oils.

FEOLATHAN is a trade name for *ferrous-ammonium lactate*, which occurs as a dark-brown, hygroscopic mass with a greenish fluorescence, and containing 7 per cent. of iron. It is marketed in the form of pills, each containing $1\frac{1}{2}$ grains of the salt.—Mfrs.: Goedecke & Co., Berlin, Germany; agts.: Schering & Glatz, New York.

FERASQUIN CAPSULES each contain quinine sulphate 2 grains, iron ferrocyanide $1\frac{1}{2}$ grains, arsenous acid $1/200$ grain, and piperin $\frac{1}{2}$ grain. They are prescribed in malaria, acute or chronic. Dose, 1 to 3 capsules every four hours or three times daily. Mfrs.: Sackett Pharm. Co., Washington, D. C.

FERCAO is a ferruginous dietetic consisting essentially of saccharated ferric oxide and cacao.

FER CREMOL is a compound of the coloring matter of the blood and iron (3 per cent.), occurring as a brown, almost tasteless powder, soluble in very dilute ammonia water and prescribed as a hematinic in doses of 10 to 20 grains thrice daily.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

FER- OR FERRO-ARSYCODILE.—See *arsycodile*.

FERFORMASAL is iron *dimethylenesalicylate*, used in anemia of gouty or rheumatic subjects. Dose, 5 to 10 grains, in capsules. See caution under *formaldehyde*.—Mfrs.: Organic Chem. Co., Philadelphia, Pa.

FERGON is described as a sterilized organic iron solution, similar to liquor ferri albuminati but permanent.—Mfrs.: C. G. H. Thedenius, Göteborg, Germany.

FERMANAS CAPSULES each contain iron albuminate $2\frac{1}{2}$ grains, manganese peptonate 1 grain, strychnine sulphate 1/60 grain, arsenous acid 1/100 grain, and capsicum $\frac{1}{4}$ grain. The mixture is prescribed as a general tonic. Dose, 1 to 2 capsules after meals.—Mfrs.: Sackett Pharm. Co., Washington, D. C.

FERMANG is a solution of iron and manganese peptonate, containing 0.6 per cent. of iron and 0.2 per cent. of manganese.—Mfrs.: Organic Chem. Co., Philadelphia, Pa.

FERMANGOL is an elixir of iron and manganese peptonate, containing 0.5 per cent. Fe, 0.1 per cent. Mn, besides glycerinophosphoric acid.—Mfr.: Apotheker Meyer, St. Goar, Germany.

FERMATOROL is an antiseptic and prophylactic cream marketed in collapsible tubes, and consisting, according to analyses, of a mixture of chinosol, aluminium acetate, and boric acid or borax.—Mfr.: Nathan, Brussels, Belgium.

FERMENLACTYL is the name applied to tablets of the lactic-acid producing bacillus bulgaricus and streptococcus lebinis. The tablets are used for conveniently preparing buttermilk, as well as an intestinal antizymotic and bactericide. Dose, 3 to 6 tablets shortly after meals.—Mfr.: Pasteur Vaccine Company, of Paris; agts.: E. Fougere & Co., New York.

FERMENTDIAGNOSTIC, also called *glyceryltryptophan* is defined as "a peptide compound of an amino acid," and is used as a diagnostic test for gastric carcinoma.—Mfrs.: Kalle & Co., Biebrich-on-Rh.; agts.: Merck & Co., New York.

FERMOCYL TABLETS represent a yeast preparation and are exploited as a remedy in diabetes.—Mfr.: Dr. E. Rath, Frankfurt-on-M., Germany.

FEROCAL is a syrup of iron and calcium phosphates, administered as a hematinic in doses of 30 to 60 minims in water.—Mfrs.: E. R. Squire & Sons, London, Eng.

FEROSIN is a ferrated syrup of guaiacol.—Mfrs.: Fritz-Petzold & Süß, Vienna, Austria.

FER-PROTYLIN (*iron-protylin*) is a yellowish-white, odorless and tasteless powder, soluble in alkaline fluids and containing 2.6 per cent. of phosphorus and 2.3 per cent. of iron in organic combination with albumin.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle (Switzerland) and New York.

FERRALBOL is, according to Rapp, a chemical compound of iron and albumin, containing 3 per cent. of iron, to which is added 1 per cent. of lecithin. It is proposed as a hematinic. Dose, $7\frac{1}{2}$ grains three times daily, in tablets (so marketed).—Mfr.: Wilh. Natterer, Munich, Germany.

FERRALBUMOSE is a Dutch meat peptone and iron preparation; a powder, containing 10 per cent. of iron.

FERRAMAT is the terse name applied to Dr. Stockmann's ferruginous pills, each containing 2 grains of iron besides bitter and aromatic substances.—Mfrs.: Dr. Stockmann's Pharm. Laboratory, Reichenbach, Germany.

FERRATIN (*ferralbumin*) is a synthetic ferric acid albuminate containing about 6 per cent. of iron, and forming a brown, almost odorless, tasteless powder. It is employed as a hematinic. Dose, 4 to 8 grains three times daily.—Mfrs.: C. F. Boehringer & Soehne, Mannheim, Germany; agts.: Merck & Co., New York.

FERRATOGEN is an iron nucleinate obtained by growing yeast in a ferruginous medium; a yellowish-gray, palatable powder, insoluble in water, and recommended by Cloëtte as a readily assimilable iron compound. Dose, 5 to 10 grains.—Mfrs.: Baseler Chem-Fabrik, Basle, Switzerland; agts.: C. Bischoff & Co., New York.

FERRATOSE (*liquor ferratini*) is a solution of ferratin, *liquor ferratini*, containing 3 per cent. of iron. Dose, 3 or 4 tablespoonfuls per day.—Mfrs.: C. F. Boehringer & Soehne, Mannheim, Germany; agts.: Merck & Co., New York.

FERRHEMIN is an organic compound of blood albumin (4.75 per cent.) and iron (0.124 per cent.), containing 20 per cent. of strong Spanish wine.—Mfr.: J. Hertel, Mian, Germany.

FERRICODYLE is a trade name for *iron cacodylate*; see this.

FERRICHTOL is a compound of iron and ichthyol, iron sulphoichthyolate or ichthyol-iron, occurring as a brownish-black, nearly odorless and tasteless powder, insoluble in the usual solvents as well as in diluted acids and alkalis, and containing $2\frac{1}{2}$ per cent. of iron. It is prescribed in anemia and chlorosis. Dose, 5 to 20 grains, in tablets (marketed as such).—Mfrs.: Ichthyol Co., Hamburg; agts.: Merck & Co., New York.

FERRIDINE is an iron, iodine and arsenic preparation, extolled as a remedy in phthisis, syphilis, anemia, etc.—Mfrs.: Gramm Specialty Co., Winchester, Tenn.

FERRIN B is an iron caseinate containing 1 per cent. of cascara sagrada.

FERRINOL is another iron nucleinate or nucleide, containing about $4\frac{1}{2}$ per cent. each of iron and phosphorus. It forms a brown, tasteless powder, soluble in warm water. It is prescribed as a blood-maker, 3 to 6 grains three times a day. Marketed also as 3-grain tablets.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

FERRIPTON is defined as a concentrated, artificially digested, liquid iron preparation made with egg albumin. Dose, several drops in water.—Mfr.: E. Kunze, Serkowitz, Germany.

FERRIPYRINE (*ferric-chloride-antipyrin*) is a compound containing about 64 per cent. of antipyrine and 36 per cent. of *ferric chloride*. It occurs as an orange red powder, soluble in 5 parts of water, also soluble in alcohol but insoluble in ether. It is used as a hematinic, styptic and astringent—internally, 5 to 15 grains, in solution or as powder; externally in 1 to 20 per cent. solutions or pure. It is incompatible with alkalies, their carbonates and bicarbonates.—Mfrs.: Chem. Werke vorm Meister, Lucius & Brüning, Hoechst, Germany; agts.: V. Koechl & Co., New York.

FERRISSOL is defined as a compound of cinnamic acid and guaiacol, to be used in phthisis; a white powder soluble in water. Dose, per os, 15 to 30 grains per day; by intramuscular injection, 15 to 45 minims of 10 per cent. solution daily.

FERROCALCOSE is a trade name adopted for syrup of calcium and iron lactophosphate.—Mfrs.: Fritz-Petzoldt & Süss, Vienna, Austria.

FERROCOLIN is a mixture of peptonized guaiacol-iron albuminate with syrup of thymol, employed in scrofula, phthisis, whooping-cough, etc.—Mfr.: A. Kreher, Lichtenfels, Germany.

FERROGEN is the trade name applied to a European solution of iron peptonate with manganese, such as is noted in the National Formulary, Third Edition.—Mfrs.: C. Bolzau & Co., Bernberg, Germany.

FERROGLIDINE is "a close organic combination of iron with glidine—a pure vegetable protein of wheat." It is marketed as tablets each containing $\frac{3}{4}$ grain of metallic iron. It is used as a hematinic. Dose, 1 to 2 tablets three times a day.—Mfr.: Dr. V. Klopfer, Dresden-Leubnitz, Germany; agts.: Menley & James, New York.

FERROGLUTIN is prepared either by adding to pure albumin, definite quantities of quinates and then adding ferric salts (such as ferric chloride), or by treating pure al-

bumin with a solution of an iron salt and then adding the quinic acid compounds. In the first instance no separation takes place, and in the second case the iron-albumin compound first formed is again instantly dissolved by the quinates, forming a liquid. It is intended for use as a hematinic.—Mfr.: "Wolffenstein."

FERROLEUM is a 50 per cent. emulsion of phosphorated cod liver oil containing in addition iron phosphate.—Mfrs.: Ferroleum Co., London, W. C.

FERROMANGAN is a solution of iron peptonate with manganese containing 0.6 per cent. of iron, 0.1 per cent. of manganese and 1.5 per cent. of peptone. It is used as a hematinic, like the N. F. solution. Dose, 1 to 4 fluid drams.—Mfrs.: Chem. Fabrik Helfenberg (E. Dietrich), near Dresden; agts.: Reinschild Chem. Co., New York.

FERROMANNIN is a liquid preparation described as a "saccharo-mannite" of iron, "containing 1 grain of iron expressed as FeO " to the tablespoonful.—Mfrs.: Ferrömannin Chem. Co., New York.

FERROPLASMA is defined as "an organic iron compound obtained from cultivated plants of *rumex crispus*, containing 3 per cent. of metallic iron." It is claimed to be easily assimilable and not to cause constipation or digestive disturbance.—Mfrs.: C. Haubner's Engel Apotheke, Vienna I, Austria.

FERROPYRINE is identical with *ferripyrrine*.—Mfrs.: Knoll & Co., Ludwigshafen-on-Rh. and New York.

FERROSAL, also known as "liquor ferri oxydati natronati saccharati," is a hematinic containing 0.77 per cent. of iron and stated to be quite permanent and not altered by acids, alkalies or temperature changes. Dose, tablespoonful thrice daily.—Mfr.: F. Stahlschmidt, Hagen, Germany.

FERROSE is an iron-proteid-formaldehyde compound, containing 10 per cent. of Fe. Dose, 5 to 10 grains after meals. See caution under *formaldehyde*.

FERROSIN is an organic compound of iron and phosphorus occurring, according to the patent specification, as a yellowish-white, odorless, tasteless powder, containing 12 per cent. of iron and being sensitive to light. It is put forward as a tonic and hematinic.—Dr. Carl Sorger, Frankfurt-on-M., Germany; agts.: C. Bischoff & Co., New York.

FERRO-SOMATOSE, also designated as *iron-somatose* and *iron-albuminose*, is a light-brown, almost tasteless, odorless powder, readily soluble in water, and said to contain the "nutritious elements of meat" with two per cent. of iron organically combined. Dose, 3 or 4 teaspoonfuls per day.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

FERROSTYPTIN is a double salt of hexamethylene-tetramine hydrochloride and ferric chloride, of the formula $(CH_2)_6H_4.HCl.FeCl_3$. It occurs in yellowish-brown crystals, containing 15 per cent. of iron and readily soluble in water. It is used as a styptic and antiseptic, chiefly in dental practice. See caution under *formaldehyde*.—Mfr.: Dr. C. L. Marquadt, Beuel, Germany.

FERROTONOL is the new name applied to *iron-tonol*, or *iron glycerophosphate*.—Mfr.: E. Schering, Berlin, Germany; agts.: Schering & Glatz, New York.

FERROVOSE contains iron organically combined with albumin.

FERROZONE is *ferrous vanadate*, introduced by Dr. B. Rohden and marketed as 3-grain sugar-coated pills. It is used as an alternative tonic. Dose, 1 or 2 pills three times a day.—Mfr.: "Pharmako," Lippspringe, Germany.

FERRUGINE is a solution of iron and manganese peptonate.—Mfrs.: Hummeland Drug and Chem. Co., Chicago, Ill.

FERSAN is claimed to be the iron compound present in the erythrocytes of fresh ox blood; chemically, a paranucleoprotein compound of iron. It is employed as a nutrient and tonic, in doses of 30 to 90 grains per day. Marketed as powder and tablets, also as *iodo-fersan* tablets each containing $1\frac{1}{2}$ grains of potassium iodide and 6 grains of fersan.—Mfrs.: Fersan-Werke, Vienna IX, Austria.

FERSINAL is described as a non-alcoholic liquid preparation of iron containing 0.6 per cent. of metallic iron in organic form.—Mfrs.: Hausmann Bros., St. Galen, Switzerland.

FERVIN is a meat extract with iron, marketed in gelatin capsules.—Mfr.: W. Schenck, Frankfurt-on-M., Germany.

FESTOFORM, a solidified formaldehyde obtained from formaldehyde solution by means of soap. It occurs as a white mass that dissolves in water with slight opalescence and is used as tablets or pastilles for various disinfecting purposes. *Festoform smelling-salt* is used in affections of the nose, and *festoform toilet-cream* is employed for cosmetic purposes.—Mfr.: Dr. Hirschberg, Berlin, Germany.

FETRON is an ointment base introduced by Prof. Liebreich, in physical properties being between lanolin and petrolatum and consists of 3 per cent. of stearic acid anilid and 97 per cent. of petrolatum.—Chem. Fabrik "Hansa," Hemelingen, Germany.

FETROSAL (*velosan*) is an ointment consisting of fetron, salicylic acid and salol, and used as a topical anti-rheumatic.—Mfrs.: Lüthi & Buhtz, Berlin SW, Germany.

FIBROLYSIN is a sterilized 15 per cent. solution of a double-salt of *thiosinamine* (2 mols.) and *sodium salicylate* (1 mol.), introduced by F. Mendel as a succedaneum

for thiosinamine hypodermically. As is known, thiosinamine is but slightly soluble in water, so that alcoholic solutions have to be employed and these are quite painful. The new compound occurs as a white powder easily soluble in water. Its solutions, however, are readily decomposed by air, and hence the medicament is marketed in ampuls containing 2.3 c.c. of the solution (equal to 0.2 stadt, Germany; agts.: Merck & Co., New York).

glandular swellings, to remove scars, etc. Dose, 1 ampul intramuscular injection or intravenously, in lupus, chronic phous acid isolated by Kraft from oleoresin of male fern gram of thiosinamine). It is used hypodermically, by daily or every second or third day.—Mfr.: E. Merck, Darm.

FIBROLYSIN PLASTERS contain 10 grammes of fibrolysin (the double salt of thiosinamine and sodium salicylate) in 1 meter of plaster and are recommended for the treatment of scars.

FILICON is a new antihelminthic derived from an extract of *aspidium spinulosum*. It consists of an 8 per cent. solution of the active principle of the extract in aromatized castor oil. Dose, a tablespoonful.

FILMARON (*filmaronic acid*), $C_{44}H_{84}O_{10}$, is the amorphous and regarded as the anthelmintic principle of the latter. It appears as a brownish-yellow powder, insoluble in water, slightly soluble in alcohol, but freely soluble in the remaining usual solvents. It has a strong tendency to cake together to form a resinous mass difficult to reduce to powder and dispense; hence it is not marketed in substance but as a 10-per-cent. castor oil solution known as *filmaron oil*. Dose of latter as an anthelmintic, $2\frac{1}{2}$ fluid drachms followed by a purgative.—Mfrs.: C. F. Boehringer & Soehne, Mannheim, Germany; agts.: Merck & Co., New York.

FILMOGEN, also known as *acetone-collodion*, *collosin*, and *liquor adhesivus*, is a solution of pyroxylin in acetone and a fatty oil intended for use as a protective as well as a vehicle for dermic remedies.

FLATULIN PILLS consist of a mixture of 4 parts each of sodium bicarbonate, magnesium carbonate and powdered rhubarb, and 2 parts each of oils of fennel, caraway, and peppermint. Dose, 3 or 4 pills after meals.—Mfr.: Dr. I. Roos, Frankfort-on-M., Germany.

FLAVOIODIN is a quinoline derivative credited with antipyretic and antiseptic properties.

FLORICIN is a product obtained from castor oil, which is miscible with mineral oils, and is intended, aside from technical uses, as an ointment and liniment base. It is a yellowish-brown, fluorescent liquid resembling castor oil; almost insoluble in alcohol and acetic acid, but takes up water readily and yields an ointment-like mass when triturated with a little water and an unstable emulsion when rubbed up with much water.

FLOROZONE is described by the makers as "a solution of gases of great germicidal power which when liberated by spraying or sprinkling, is of the same specific gravity as air. The air thus becomes saturated, creating a 'florozone atmosphere' which permeates every nook, corner and crevice with a disinfectant powerful enough to destroy germs and bacteria of the highest resistance."—Mfrs.: Bellevue Chem. Co., Brooklyn, N. Y.

FLUIDEXTRACT CANNABIS AMERICANA has been launched on this market and has been credited with equal therapeutic value as fluidextract cannabis indica grown in India. The plant is cannabis sativa grown in America. Action, dose, etc., are the same as of the official fluidextract of cannabis indica.—(Nonproprietary.)

FLUINOL (*fluorpinol*) is an alcoholic extract of pine needles impregnated with ethereal oils, used as an addition to baths, gargles and washes, also for inhalation and by atomization in various affections.

FLUORALBIN is the name applied to water-soluble flexible vaginal suppositories containing zymen (a dried medicinal yeast) and used in leucorrhea (*fluor albus*).—Mfrs.: Königl. Hof-Apotheke, Dresden, Germany.

FLUORESCEIN (*resorcinolphthalein*; *dioxyfluoran*) is an aniline dye occurring as an orange-red powder, insoluble in water, ether or chloroform, but soluble in alkaline solutions, forming salts of the alkalies. A solution consisting of 2 grams of fluorescein, 3 grams of sodium bicarbonate and enough distilled water to make 100 c.c. is used for diagnosing corneal lesions and detecting minute foreign bodies imbedded in the cornea. This solution will not stain the normal cornea, but ulcers will become green and foreign bodies will appear surrounded by a green ring; loss of substance in the conjunctiva is indicated by a yellow hue.—Mfrs.: Anilin makers in general.

FLUOROFORMOL (*fluoroform water*; *fluoryl*) is a saturated (2.8 per cent.) aqueous solution of fluoroform gas CHF_3 ; a nearly tasteless and odorless, non irritating liquid, used mainly in tuberculosis, whooping-cough and pneumonia. Dose, tablespoonful four times a day; in whooping-cough, $\frac{1}{2}$ to 1 teaspoonful hourly.—Mfrs.: Valentiner & Schwarz, Leipsic-Plagwitz; agts.: C. Bischoff & Co., New York.

FLUOROL is *sodium fluoride*.

FLUORRHEUMIN, also designated as *antirheumin* and *antirheumatin*, is a 5 per cent. ointment of fluorphenetol, employed in rheumatism, lumbago, neuralgias, etc., 5 grams being rubbed in several times a day.—Mfrs.: Valentiner & Schwarz, Leipsic-Plagwitz; agts.: C. Bischoff & Co., New York.

FLUORYL. See *fluoroformol*.

FLUTAL is a *fluorobromophenyl-bismuth*, claimed to be a powerful antiseptic.

FOMITIN is a cold-prepared fluid extract of the fungi fomes cinnamomeus and fomes igniarius; a reddish-brown alkaline liquid of fungoid odor and slightly bitter taste, used in diseases of the bladder, dysmenorrhea, hemorrhoids, etc. Dose, 1 to 4 tablespoonfuls several times daily.—Mfr.: M. Hellwig, Berlin NO, Germany.

FORGENIN is a fanciful name applied to *tetramethylammonium formate*. See caution regarding formates under formaldehyde.

FORMACETONE is a French disinfectant of undivulged composition.—Mfr.: E. Fournier, Paris, France; agts.: E. Fougere & Co., New York.

FORMALDEHYDE Solution is now official, hence fully described in the U. S. Pharmacopœia and other easily accessible works of reference. The proposed medicinal use of it in any form opens an extremely grave question as to a certain ultimate effect. It has been suggested that the deadly and sight-destroying power of wood alcohol which is now well known, is due to its decomposition in the system into formic acid, this acid being the destructive agent. If this be so, may not formaldehyde be expected to yield the same destructive acid, it being an intermediate product in the change of wood alcohol to formic acid; in other words, by further oxidizing wood alcohol (which is methyl oxide more commonly known as methyl alcohol) we get formic aldehyde (oxymethylene) and by still further oxidation this is converted to formic acid; so that formaldehyde may afford a starting point for the development of the acid, without going back to wood alcohol. A most frightful feature in wood alcohol poisoning is destruction of sight, which has so often occurred; and this feature should naturally cause the utmost care as to the introduction into the system of anything which may yield the same results; or even the slightest impairment of vision. Slight changes in that respect which might be caused by medicine might easily be overlooked or ascribed to some other cause. In view of the facts and possibilities here presented, it has been thought necessary to add to descriptions of articles which may yield formaldehyde in the system by decomposition ("splitting up"), a caution referring to this paragraph, and in these have been included those with the methylene group, and formates from which formic acid might be set free; such cautions may possibly have been in some cases overlooked so the reader will do well to be on the alert in regard to the subject here as well as in other literature. Applications, it must be remembered, will introduce a medicament into the system as well as usual internal administration.

FORMALDEHYDE-CASEIN, also known as *formalbumin*, was a condensation product of formaldehyde and casein introduced a few years ago as a wound antiseptic, but latterly withdrawn from the market. See caution

under *formaldehyde*.—Mfr.: Formerly E. Merck, Darmstadt, Germany.

FORMALDEHYDE-GELATIN.—See *glutol*

FORMALDEHYDE, PARA.—See *para-formaldehyde*.

FORMALDEHYDE-TANNIN.—See *tannoform* and *formatan*.

FORMALDEHYDE-THIOLIN is a compound analogous to if not identical with *ichthoform*; see the latter. See caution under *formaldehyde*.—Mfr.: J. H. Wolfenberger, Basle, Switzerland.

FORMALIN is a brand name for *solution formaldehyde* as marketed by Schering & Glatz, New York.

FORMALIN-TANNIN is the same as *tannoform*, *formotan* and other condensation products of formaldehyde and tannic acid. See caution under *formaldehyde*.

FORMALOIN (*aloin-formal*), $\text{CH}_2\text{C}_{17}\text{H}_{16}\text{O}_7$, occurs as a yellow, amorphous, tasteless powder, which is insoluble in water and sparingly soluble in alcohol. It is intended as a non-bitter succedaneum for aloin in about twice the dose of the latter.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

FORMALYPTOL is a colorless liquid antiseptic containing 5 per cent. of formaldehyde (gas), 0.075 per cent. of thymol, 0.3 per cent. of eucalyptol, 0.075 per cent. each of camphor and oil gaultheria, normal tincture baptisia 0.625 per cent., benzoic acid 0.8 per cent., and boric acid 2 per cent.—Mfr.: Wm. S. Merrell Chem. Co., Cincinnati, O.

FORMAMINE is another of the numerous trade names for *hexamethylenetetramine* (hexamethylenamine U. S. P.).

FORMAMINE TABLETS each contain hexamethylenamine 2 grains, sodium salicylate 5 grains, and colchicine, 1/200 grain. They are used in gout and rheumatism.—Mfr.: Eli Lilly & Co., Indianapolis, Ind.

FORMAMINT TABLETS contain $\frac{1}{6}$ grain of formaldehyde and some menthol. They have been brought out as throat antiseptics for use as a gargle in quinsy sore-throat, diphtheria, etc. See caution under *formaldehyde*.—Mfrs.: Bauer & Co., Berlin SW, Germany.

FORMAMOL is the name by which *hexamethylenamine anhydromethylenecitrate*, better known in this country by the trade name *helmitol*, is known in British pharmacy.

FORMAN (*chloro-methyl-menthyl ether*) is a chlorinated methyl ester of menthol of the formula $\text{C}_{10}\text{H}_{19}\text{C}(\text{CH}_3)\text{CH}_2\text{Cl}$, and occurs as a colorless, limpid, levogyrate oily liquid, decomposed by water into formaldehyde, menthol and hydrochloric acid. Brought forward as an inhalant in catarrhal affections of the respiratory tract. See caution under *formaldehyde*.—Mfrs.: Lingner's Chem. Laboratorium, Dresden A, Germany.

FORMANILID (*phenyl-formamide*), $\text{C}_6\text{H}_5\text{NH}.\text{CHO}$, is a reaction product of anilin and formic acid; colorless or

yellow crystals, soluble in water, alcohol, glycerin, or oils. It is brought forward as an anesthetic and analgesic, and for insufflation in catarrh. Dose, 2 to 4 grains. See caution under *formaldehyde*.—Mfrs.: E. Merck and others.

FORMASAL is described as a condensation product of formaldehyde and salicylic acid, or *methylene-disalicylic acid*. It is used chiefly in the form of its salts, aluminoformal, bisformasal, etc. See caution under *formaldehyde*.—Mfrs.: Organic Chem. Co., Philadelphia, Pa.

FORMASEPTOL is a liquid antiseptic containing $\frac{1}{2}$ per cent. of official formaldehyde solution, thymol, eucalyptol, menthol, gaultheria, sodium borate and benzoic acid.—Mfr.: Eli Lilly & Co., Indianapolis, Ind.

FORMASOL is a disinfectant marketed by a German firm. From its name it is presumably a formaldehyde preparation. It should not be confounded with the American "formosal" (defined as dimethylene-salicylic acid) a compound from which formaldehyde may perhaps be regenerated.—See caution under *formaldehyde*.—Mfrs.: Fritz-Petzoldt & Süss, Vienna, Austria.

FORMATAN is a condensation product of formaldehyde and tannin, apparently identical with the older *tannoform*. It is used chiefly as an intestinal astringent and antiseptic, in doses of 5 to 15 grains several times daily, but it is serviceable also to arrest excessive perspiration. Marked also in tablets. See caution under *formaldehyde*.—Mfrs.: H. K. Wampole Co., Philadelphia, Pa.

FORMATINE is described as an elixir of sodium formate and sodium phosphate, employed as a nervine and alterative. Possible risks from the use of formates are pointed out in the article on formaldehyde.—Mfrs.: Laboratoires "Optima," Brussels, Belgium.

FORMATOL is a disinfectant dusting-powder said to contain about 12 per cent. of formaldehyde. See caution under *formaldehyde*.—Mfrs.: Chem. Fabrik "Seelze," Hanover, Germany.

FORMATOLBRIKETTS, a Dutch preparation, are black, triangular tablets, possessing an intense odor of formaldehyde, of which they contain 50 to 60 per cent. When ignited formaldehyde is evolved.

FORMATONE (*solution of pentaformates*) is a liquid preparation said to contain in each fluidounce lithium formate 2 grains, strontium formate 14 grains, magnesium formate 8 grains, sodium formate 16 grains and quinine formate 2 grains. It should be noted that formaldehyde may be liberated from formates, and this would involve a serious risk which is mentioned under formaldehyde.—Mfrs.: J. Wyeth & Bro., Philadelphia, Pa.

FORMATOROL is defined as an antiseptic. According to Aufrecht it is a mixture of chinosol, aluminum acetate, tartaric acid and boric acid or sodium borate.

FORMAZOL is an "antiseptic, oxydizing inhalation remedy" for use in phthisis and bronchial catarrh; tablets containing according to reports about 80 per cent. of paraformaldehyde and small quantities of iodoform, chloral hydrate, terpinol and menthol. See caution under *formaldehyde*.—C. F. Haussmann, St. Gallen, Switzerland.

FORMCALLISTAN is a compound of formaldehyde with some vegetable mucilage, brought forward a short time ago as a gout remedy, but apparently already fallen into oblivion.

FORMESTON.—See under *eston*.

FORMIC ALDEHYDE.—See *formaldehyde*.

FORMICIN (*formaldehyde acetamide*) is a very hygroscopic substance, and hence marketed only as concentrated solution—a colorless, syrupy liquid of the specific gravity 1.140 to 1.180, having a faint peculiar odor and acidulous-bitter taste, and miscible in all proportions with water, alcohol or chloroform, readily soluble in glycerin, sparingly soluble in ether, decomposed by acids and alkalis readily and by water gradually, formaldehyde being liberated. It is used as a disinfectant and deodorant in abscesses, purulent wounds, cystitis, surgical tuberculosis, etc., in 2 per cent. solution. See caution under *formaldehyde*.—Mfrs.: Kulle & Co., Biebrich, Germany; agts.: Lehn & Fink, New York.

FORMIDINE is described as *methylene-iodo-disalicylic acid*, $C_{12}H_{10}O_2I_2$, an iodized derivative of salicylic acid and formaldehyde. It is exploited as an antiseptic and alternative, for external use chiefly. See caution under *formaldehyde*.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

FORMIN is one of the many brand names for *hexamethylene-tetramine*, now official as *hexamethylenamine*.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

FORMOBOR is, according to the statements of the manufacturer, an aqueous solution containing 4 per cent. of formaldehyde and $1\frac{1}{2}$ per cent. of borax. It is recommended as a disinfectant of surgical instruments, etc.

FORMOCHLORAL is a brand of *formaldehyde* solution that is used in the Trillat autoclave for general disinfection purposes; it contains some calcium chloride, ostensibly to make it give off the HCOH more satisfactorily.—Mfrs.: Fries Bros., New York.

FORMOFORIN is a foot powder stated to consist of formaldehyde solution, actanilid, boroglyceride, sodium borobenzoate, eucalyptol, thymol, menthol, wintergreen oil, alcohol and extract of witchhazel. It is generally used more or less diluted with water externally; internally in doses of $\frac{1}{2}$ to 2 teaspoonfuls diluted, several times daily. See caution under *formaldehyde*.—Mfrs.: H. K. Wampole Co., Philadelphia, Pa.

FORMOPHEN TABLETS probably consist, according to Dr. Zernik, of a condensation product of formaldehyde and phenol. They are used as a disinfectant by volatilization.

FORMOPYRINE (*methylene-diantipyrin*) is obtained by heating 5 parts of antipyrin with 4 parts of formaldehyde solution for several hours at 120° C. It forms white crystals soluble in alcohol and insoluble in water. It acts as an antipyretic and antiseptic. See caution under *formaldehyde*.

FORMOSAPOL is essentially a soap solution impregnated with formaldehyde, a product similar to *lysoform*. See caution under *formaldehyde*.

FORMULSIN is a soap solution of formaldehyde, offered as an antiseptic.

FORMUROL is the trade name of what is defined as *hexamethylenetetramine-sodium citrate*, $C_6H_{12}O_4Na.C_7H_{12}N_4$. It occurs as a white, water-soluble powder, and is used as a urinary disinfectant and antilithic. Dose, 15 grains two to five times a day. See caution as to methylene compounds under *formaldehyde*.—Mfrs.: Chem. Fabrik. "Falkenberg," Falkenberg, Germany.

FORMYLPHENETIDIN (*formphenetidin*, *para-oxyethyl-formanilid*), $C_6H_4OC_2H_5.NH.HCO$, is made by heating paraphenetidin hydrochloride with anhydrous sodium formate and formic acid. It occurs as colorless, shining needles or leaflets that are readily soluble in alcohol or hot water. It is used as an antispasmodic. Dose, 3 to 6 grains. See caution under *formaldehyde*.

FORMYL TRIBROMIDE is *bromoform*.

FORMYSOL is a trade name for a formaldehyde mixture containing also methyl alcohol, which latter is highly poisonous and causes blindness. See further caution under *formaldehyde*.

FORMYSOL is a liquid potash soap marketed in two strengths representing respectively 4 per cent. and 10 per cent. of formaldehyde gas and occurring as a greenish-yellow liquid of pleasant odor and miscible with alcohol or water in all proportions. It is offered as a disinfectant for the hands, surgical instruments, wounds, etc. It is used pure or in dilutions down to 10 per cent.—Mfrs.: Theo. Hahn & Cie, Schwedt-on-O., Germany.

FORMYSOLS are, according to Schlieben, faintly yellow, liquid glycerin-potash soaps, containing 25 per cent. of formalin (equal to 10 per cent. of formaldehyde gas) and 10 per cent. of formalin (representing 4 per cent. of formaldehyde), respectively. They are used for disinfecting the hands and surgical instruments, as well as on wounds and in parasitic skin diseases. See caution under *formaldehyde*.

FORTOIN is the name applied to *methylene-dicotoine*, a condensation product of formaldehyde and cotoine of the

formula $\text{CH}_2(\text{C}_{14}\text{H}_{11}\text{O}_4)_2$, and forming yellow, tasteless crystals or powder of faint cinnamon odor and readily soluble in chloroform and alkalis, sparingly so in alcohol or ether, and insoluble in water. It is used internally as an antidiarrheal, and externally as an astringent antiseptic (0.6 to 1 per cent. solutions). Dose, 4 to 8 grains three times a day. (See caution under *formaldehyde*.) The article appears to have been withdrawn from the American market.—Mfrs.: Zimmer & Co., Frankfort-on-M., Germany; agts.: formerly C. Bischoff & Co., New York.

FORTOSE is a nutritive consisting essentially of hemialbumose prepared from meat. It is readily soluble in aqueous fluids, odorless and tasteless. Dose, a small teaspoonful, in hot water, beef tea, milk, etc.—Mfr.: F. Witte, Rostock, Germany.

FORTOSSAN is a nutritive for small children consisting of the soluble vegetable phosphorus preparation known as phytin and milk sugar. It is marketed as 2.5 gram tablets.—Mfrs.: Gesellschaft für Chem. Industrie, Basle, Switzerland; agts.: T. D. Webb, New York.

FOSSILIN is a brand of *petrolatum*.

FRANGOL is the trade name applied to a fluid extract of buckthorn bark which is said to produce painless peristalsis.—Mfr.: Dr. Jul. Denzel, Thübingen, Germany.

FRASERIN TABLETS are said to consist of monobromated camphor, theobromine, salicylic acid, calcium phosphate, ferric oxide and other salts. They are used in migraine, headache and the like. (This article should not be confounded with the eclectic resinoid fraserin.)

FROSTIN BALSAM (*tannobromine-collodion*) is a solution of 1 part of tannobromine in 10 parts of collodion, with 1 part of alcohol and 0.5 part of tincture of benzoin added. It is used as a paint on frostbites; wounds must be avoided. *Frostin ointment* is a 10 per cent. ointment of bromocoll in resorbin as the base, and is offered as an application to open chilblains.—Mfrs.: Actiengesellschaft für Anilinfabrikation, Berlin; agts.: Lehn & Fink, New York.

FUCOL is a succedaneum for cod liver oil prepared from iodine-containing algæ and vegetable oils; an olive-green, oily liquid, of a faint taste like that of roasted coffee. It is intended to serve also as a vehicle for medicaments ordinarily exhibited with cod liver oil (phosphorus, creosote, ferrous iodide, etc.)—Mfrs.: Deutsche Fucol-Werké, Bremen, Germany.

FULMARGIN is defined as "a stable solution of colloidal silver prepared by electric vaporization." It is marketed in ampuls containing 5 c.c., and is intended for intravenous and intramuscular use in septicemia, pyemia, etc. like collargol.—Mfrs.: Physiolog.-chem. Laboratorium Hugo Rosenberg, Berlin-Charlottenburg, Germany.

FUMIFORM TABLETS weigh 2 grams each and consist of purified asphalt and small quantities of myrrh and benzoin. They are volatilized in a special apparatus, and the tuberculosis patient inhales the vapor in a well-closed room for one or two hours daily.—Mfrs.: Dr. E. Ritsert's Pharm.-Chem. Institute, Frankfort-on-M., Germany.

FUROL is a dried beer-yeast and used in boils, certain skin diseases, etc. Marketed also as a 2 per cent. soap.—Mfr.: Dr. Bonaccio, Geneva, Switzerland.

FURUNCULIN is a dried beer-yeast introduced by H. de Pury and employed internally in general furunculosis, certain eczemas, dyspepsia, etc. Dose, 10 to 30 grains three times daily, with milk or beer, immediately before meals.—Mfrs.: "La Zyma," Montreux, France.

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GABIANOL is a brown oleaginous liquid obtained from bituminous shale and used in pulmonary diseases in the dose of 4 minims four to six times daily, in capsules. It is a French analogue of ichthyol.

GACAMPHOL.—See *guacamphol*.

GADOSE is an ointment base said to be the fat of cod livers, free from uncombined fatty acids, soaps and ash constituents. It occurs as a yellow, unctuous mass which melts at 36° C. It is marketed as *anhydrous* gadose, *hydrous* gadose (25 per cent. of water), and *glycerinated* gadose (25 per cent. of glycerin). Anhydrous gadose is claimed to be capable of taking up 2½ times its weight of water.—Mfr.: J. E. Stroschein, Berlin SO, Germany; agts.: Fischer Chem. Import. Co., New York.

GADUOL is defined as an *alcoholic extract of cod-liver oil*. It occurs as a brown, oily liquid, of a bitter-acrid taste, containing the alterative principles of the oil; specific gravity 0.93 to 0.94. One part represents 4 parts of oil. It is used in place of cod-liver oil. Dose, 5 to 20 minims, in capsules or as a so-called "wine of cod-liver oil."—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

GAIIACOPHOSPHAL is *guaiacol phosphite*, a white powder of pungent taste, soluble in alcohol, glycerin, chloroform or water (moderately). It is employed as an antitubercular. Dose, 3 to 15 grains three times daily.—Marketed by Fries Bros., New York.

GAJACYL.—See *guaiacyl*.

GALACTOCHLORAL (*galactochloralose*) is a compound of chloral with galactose, occurring as glistening leaflets that are soluble in alcohol but insoluble in water or ether. It is offered as a hypnotic. Dose, 5 to 15 grains.

GALAFER is a condensed nutritive milk containing iron.

GALEGOL is prepared by extracting finely ground goat's rue (*galega officinalis*) in vacuo, evaporating to dryness at a lower temperature and granulating with milk sugar. It occurs as small, brown granules having an agreeable taste and readily soluble in water, coffee, tea, etc. It is offered as a galactagogue. Dose, a teaspoonful several times daily.—Mfr.: Dr. K. Fragner, Prague, Austria.

GALLACETOPHENENONE, also known as *trioxy-acetophenone*, *alazarin yellow*, and *methylketo-trioxy-benzene*, $C_6H_2(OH)_3.CO.CH_3$, is a brownish-gray powder soluble in alcohol, ether and glycerin. It is used in parasitic skin diseases (chiefly psoriasis) in 10 per cent. ointment.—Mfrs.: Badische Anilin & Soda-Fabrik, Ludwigshafen, Germany; agts.: McKesson & Robbins, New York.

GALLACTOGEN is a German nutritive made from casein.—Mfrs.: Thiele & Holzhausen, Barleben, Germany.

GALLAL is a trade name applied to basic *aluminium gallate*, which occurs as a brown powder insoluble in water but soluble in hydrochloric and tartaric acids. It is used as a drying antiseptic (mainly in ozena).—Mfrs.: J. D. Riedel Co., Berlin (Germany) and New York.

GALLANOL (*gallanilid*, *gallic acid anilid*, or *gallinol*), $C_6H_5.NH.CO.C_6H_2(OH)_3 + 2H_2O$, is obtained by heating gallic acid with anilin at $150^\circ C.$, and occurs as colorless or slightly brownish crystals soluble in alcohol, chloroform and ether, and used as a substitute for pyrogallol in skin diseases (5 to 20 per cent. ointments, solutions or dusting powders).—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

GALLIANIN is a "solution of 5 volumes of ozone in 1 volume of harmless vehicle," recommended by French veterinarians in infectious pneumonia, influenza, etc., of horses, cattle and dogs. Dose, 1 to 20 c.c. once daily, intravenously.

GALLIC ACID ANILID.—See *gallanol*.

GALLIC ACID METHYL ESTER is referred to under *gallicin*.

GALLICIN or *gallic acid methyl ester*, $C_6H_2(OH)_3.COO.CH_3$, forms a grayish-white crystalline powder soluble in alcohol or ether, and is employed as a dusting-powder in eye diseases (chiefly conjunctivitis).—Mfrs.: Sandoz & Co., Basle, Switzerland.

GALLIN is a proprietary gall-stone remedy put up in three bottles, one of which contains a decoction of anise and fennel in which sodium bicarbonate, sodium sulphate, sodium chloride and extract of rhubarb are dissolved.—Mfr.: B. Deichmann, Mannheim, Germany.

GALLINOL is a synonym of *gallanol*.

GALLISOL is a mixture said to contain sulphurated potassa, castor oil, birch tar, alcohol and oil of pepper-mint. It is exploited as a remedy for gallstones.—Mfr.: Louis Lasson, Berlin NW, Germany.

GALLOBROMOL or *dibromogallic acid*, $C_6Br_2(OH)_2CO_2H$, is made by rubbing together 1 part of gallic acid and $2\frac{1}{2}$ parts of bromine and recrystallizing from water, and forms a light-brown powder soluble in water, alcohol or ether. It is used internally as a nerve sedative and externally as an antiseptic astringent in 1 to 4 per cent. solution (in gonorrhea and cystitis), and as dusting-powder or paste (in skin diseases). Dose, 10 to 30 grains, generally in solution with an acid syrup.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

GALLOFORMIN, or *formin (hexamethylenetetramine) gallate*, $C_6H_7(OH)_2COOH.(CH_2)_6N_4$, occurs as hard needles that are difficultly soluble in water, alcohol, ether or glycerin, and insoluble in chloroform or olive oil. It is intended for use internally and externally as an astringent antiseptic. See caution under *formaldehyde*.—Mfr.: Dr. C. F. Henning, Berlin SW, Germany.

GALLOGEN (*ellagic acid*), $C_{14}H_6O_8$, occurs as a yellow, odorless, tasteless powder, insoluble in all acid or neutral media, but soluble in alkalis. It is prescribed as an intestinal astringent. Dose, 15 grains; children 5 to 8 grains. Supplied also as 3-grain chocolate tablets. A veterinary grade is also marketed.—Mfr.: Dr. Ad. Heinemann, Elberswalde, Germany; agts.: C. Bischoff & Co., New York.

GALMANIN is a dusting-powder which consists, according to Dr. Zernik, of a mixture of zinc oxide, magnesium carbonate, talcum and starch.—Mfr.: Apotheke Karpinski, Warsaw, Russia.

GARANTOSE is one of the many trade names for *benzoylsulphonic imide* (better known as *saccharin*).—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

GASTERIN is a gastric juice obtained by Fremont from dogs.

GASTERINE is a French *bismuth phosphate*.

GASTEROGEN is the name applied to an appetizer and digestive prepared from the gastric juice of the dog, which is marketed as tablets, simple also in combinations with rhubarb (5 per cent.), cinchona (5 per cent.) or condurango (10 per cent.).—Mfrs.: Chem. Labor. "Wedenberg," Berlin NW, Germany.

GASTRICIN is a digestive powder reported to contain ammonium carbonate, ammonium chloride, potassium bitartrate, sal rochelle, crab's eyes, magnesium carbonate, magnesium citrate, magnesium lactate, sodium chloride, sodium sulphate, and sodium bicarbonate.—Mfr.: J. Traub.

GASTRIN TABLETS are said to consist of linden charcoal, magnesium carbonate and cascara sagrada.—Mfr.: Apotheker Kurtzweg, Berlin N, Germany.

GASTROGEN is "a neutralizing digestive, indicated in various forms of indigestion," marketed only in tablet form.—Mfrs.: Bristol-Meyers Co., Brooklyn, N. Y.

GASTROMYXIN is a pepsin preparation derived directly from the stomach of the ox.—Mfr.: Gustav Herites, Prague, Hungary.

GASTROSAN is a trade name applied to *bismuth disalicylate*, a white, odorless, sweetish powder, insoluble in alcohol.—Mfrs.: Heyden Chem. Works, Radebeul, near Dresden, and New York.

GASTROSOTE is defined as a digestant containing in 10 parts, 1 part of pepsin and 1 of hydrochloric acid combined with albumin. Dose, 4 to 8 grains.—Mfr.: J. E. Stroschein, Berlin SO, Germany; agts.: Fischer Chem. Importing Co., New York.

GAULTHERINE (*asepsin*) is the "sodium salt of methyl salicylate," silky needles, of wintergreen odor and freely soluble in water, and used as antiseptic (1 to 2 per cent. solutions) and antizymotic. Dose, 1 to 5 grains well triturated with powdered liquorice or milk sugar.—Mfrs.: Lloyd Bros., Cincinnati, and Wm. S. Merrell Chem. Co., Cincinnati, O.

GAZEOL is stated to be a mixture of carbohc acid, acetone, benzin (of each 10 grams), tar (90 grams), naphthalin (1 gram) and concentrated ammonia water (1 liter), which when made is let stand for a week with occasional shaking and then decanted. It is used chiefly in whooping-cough, a little being poured into flat plates and allowed to evaporate.

GELANTHUM is a water-soluble vehicle for dermics, a colorless paste consisting of equal parts of gelatin and tragacanth, together with sufficient of a mixture of equal parts of glycerin and rose water, besides a little thymol (as a preservative).—Mfr.: W. Mielck, Hamburg, Germany; agts.: Merck & Co., New York.

GELASEPSIN is the name applied to a supposedly sterile solution of gelatin in physiological salt solution used hypodermically to arrest hemorrhage. Tetanus germs may exist in gelatin and are difficult to destroy. Fatal cases have resulted from imperfectly sterilized solutions.

GELATIN solutions have been used hypodermically in hemorrhage; this use, and possibly uterine or rectal injection also is attended with risk of tetanus infection. See *gelasepsin*.

GELATOL is an ointment base consisting of oil, glycerin, gelatin and water.—Mfrs.: Johnson & Johnson, New Brunswick, N. J.

GELATOSE-SILVER is better known as *albargin*; see this.

GELOCAL CAPSULES are said to contain potassium iodide and mercuric iodide, and are employed as an anti-

syphilitic.—Mfr.: G. Pohl, Schönbaum, near Danzig, Germany.

GELONES and TEGONES are plasters recommended by Bauer; the former are glycerin and gelatin preparations with which various medicaments are incorporated and which stick well on being moistened with water. Agar-agar serves as the vehicles in the tegones.—Mfrs.: Sans & Peschka, Vienna, Austria.

GELSEMIN and GELSEMININE are two preparations from gelsemium, concerning which confusion exists among physicians as well as pharmacists. Gelsemin is a *resinoid*, occurring as a brownish-yellow powder. Gelseminine, $C_{22}H_{29}N_3O_2$, is an *alkaloid* and forms white crystals. Both articles are soluble in alcohol but insoluble in water; and their physiologic action is the same in kind but vastly different in degree. Gelsemin (resinoid) is given in doses of $\frac{1}{8}$ to 1 or even 2 grains. The single dose of gelseminine (alkaloid) is $\frac{1}{120}$ to $\frac{1}{30}$ grain, and its maximum daily dose $\frac{1}{6}$ grain; as antidotal treatment emetics, atropine or strophanthin is used, besides artificial respiration.—(Nonproprietary.)

GENEFORM, from the literature extant on the subject, appears to be a condensation product of acetyl-salicylic acid and formaldehyde intended for use in gout and rheumatism, neuralgia, etc. It occurs as a white powder of slightly acid taste, sparingly soluble in cold water, but freely soluble in alcohol, ether and hot water. It is split up in the intestines into salicylic acid, acetic acid, and formaldehyde. Dose, 6 to 8 grains every two or three hours, as powders usually. See caution under *formaldehyde*.—Marketed by C. Bischoff & Co., New York.

GENITONE is described as a uterine tonic and sedative, each fluid dram of which represents golden seal 5 grains, black haw 8 grains, pulsatilla 2 grains, passion flower 4 grains, and senecio aureus 5 grains, in aromatic cordial.—Mfrs.: Wm. S. Merrell Chem. Co., Cincinnati, O.

GENTIANIN is the crude bitter principle (gentianic acid or gentisin) of gentian; a dark-brown extract soluble in alcohol and given in doses of 4 to 15 grains thrice daily as a tonic.—(Nonproprietary.)

GENTIOPICRIN is a bitter glucoside obtained from gentian root. It is readily soluble in water or diluted alcohol, and has been introduced by Dr. G. Tanret as an antiperiodic. Dose, 15 to 30 grains.

GEOFORM, which has several trade aliases, is described under its chemical designation, *methylene-di-guaiacol*.

GEOSOTE is *guaiacol valerianate* or *valeryl-guaiacol*, $C_6H_4(OCH_3)O.CO.C_4H_9$; a yellowish, oily liquid, of smoky odor and burning taste, soluble in alcohol or ether. It is used as an antitubercular and an intestinal disinfectant.

Dose, 3 to 10 minims, gradually increased to 20 minims, in capsules or milk, three times daily. Marketed also as 3-minim capsules.—Mfrs.: J. Lehman, Berlin; agts.: Fischer Chem. Importing Co., New York.

GEOTALOSE is a form of "mucocolloidal creosote," occurring as an elastic, grayish-green substance melting at 26° C. to a syrupy fluid that may be diluted with water. It is used in diarrhea and in vomiting due to gastro-intestinal catarrh or fermentation.

GERDAL is described as a combination of beef juice, albumin and sugar; a grayish-yellow powder, used as a nutrient in doses of 3 teaspoonfuls three times a day, with other food or drink. Do not boil it.

GERMOL is an English disinfectant, a dark liquid, consisting of crude cresols.

GETAW, Dr. Bode's, contains sodium perborate.

GICHTOSAN, advertised as a remedy for the treatment of rheumatism, gout, etc., is said to contain menthol, ichthyol, chloral hydrate, camphor, borax and methyl salicylate.—Mfr.: A. Haering, Berlin, Germany.

GINGAMENT is the name applied to tablets said to contain sodium bicarbonate, ammonium carbonate, oleoresin of ginger, saccharin and peppermint oil.—Mfrs.: Burroughs, Wellcome & Co., London and New York.

GIRAU CORNE is a French veterinary rosin ointment containing resorcinol.

GIVASAN PASTE is a tooth-paste containing *hexamethylenamine* as its therapeutically active ingredient. It is intended for use as a prophylactic of mercurial gingivitis during treatment of syphilis.—Mfrs.: J. D. Riedel Co., Berlin (Germany) and New York.

GLANDON TABLETS represents a combination of thyroid gland, adonidin and sodium cacodylate, and is used in exophthalmic goiter, myxedema, etc.—Agts.: Morgenstern & Co., New York.

GLANDULEN is prepared from the bronchial glands of sheep; a yellowish powder, which is marketed as 0.25 gram tablets, each of which represents 0.05 gram of fresh gland and which are employed in phthisis. Dose, 1 to 3 tablets three times daily.—Mfrs.: Hofmann Nachf., Meersburg, Saxony; agts.: Lehn & Fink, New York.

GLECOMINA CARATI EXTRACT is an Italian preparation put forward for the treatment of diseases of the respiratory tract.

GLIDINE is defined as "a pure vegetable albumin derived wholly from the core of a variety of wheat peculiarly rich in protein and containing in the fully dried state albumin 95.69 per cent., lecithin 0.87 per cent., carbohydrates 2.72 per cent., and ash 0.72 per cent." It occurs as a yellowish, fine, odorless and practically tasteless powder, which swells but does not dissolve in water. It is employed

as a nutrient and reconstructive. Dose, 2 to 3 dessert-spoonfuls daily, stirred into broths, chocolate, milk, etc.; it should not be boiled with the foods. Marketed also in various combinations; *arsenglidine* (*arsan*); *bromo-glidine*; *ferro-glidine*; *iodo-glidine*; *mercuro-glidine* (*luesan*).—Mfr.: Dr. V. Klopfer, Dresden-Leubnitz, Germany; agts.: Menley & James, New York.

GLOBON is a nutritive representing a combination of vegetable and animal paranucleins; a yellowish, odorless, and tasteless powder, insoluble in water but soluble in alcohol (particularly in the presence of a small quantity of organic acid). Dose, 1 to 3 teaspoonfuls, in soup, milk, etc. It seems to have been withdrawn from the market.

GLOBULARETIN, C_6H_8O , is a cleavage product of globularin, possessed of purgative and diuretic properties.

GLOBULARIN, $C_{12}H_{20}O_8$, is a glucoside of globularia alpum and vulgaris. It occurs as a brownish-yellow powder soluble in alcohol, and acts like caffeine upon the heart and nervous system. It is used in rheumatism, gout, uremia, etc., generally combined with globularetin in the form of the French teinture prosolide (globularin 0.5, globularetin 0.7, alcohol [60 per cent.] 20.0; dose, 8 to 20 drops twice daily).

GLUCOCHLORAL or *glycochloral*.—See *chloralose*.

GLUSIDE is the British Pharmacopœial name for *saccharin*.

GLUTANNOL is a compound of vegetable fibrin and tannic acid, prescribed as an intestinal astringent without action in the stomach (owing to its insolubility in water and acid liquids). Dose, 5 to 15 grains, in powders or suspension.—Mfrs.: Dr. R. Hundhausen, Hamm, Germany.

GLUTEKTONES are gelatin pencils medicated with alpha-eigon, zinc oxide, salicylic acid, or ichthyol, and used in eczema by rubbing over the wetted skin until a thin coating has been formed.—Mfrs.: Chem. Fabrik "Helfenberg," Helfenberg, Germany; agts.: C. Reinschild Co., New York.

GLUTOFORM is synonymous with *glutol*.

GLUTOID CAPSULES are gelatin capsules hardened with formaldehyde and supplied in three degrees of resistance to gastric juice—weak, medium and strong. They are intended to be used for drugs that are to act only in the intestine. See caution under *formaldehyde*.—Mfr.: C. Fr. Hausmann, St. Galen, Switzerland.

GLUTOL (*glutoform*, *formaldehyde-gelatin*) occurs as a white to yellowish, odorless, powder, which is used pure as a wound antiseptic liberating formaldehyde on contact with the wound secretions. (See caution under *formaldehyde*).—Mfr.: E. Schering, Berlin; agts.: Schering & Glatz, New York.

GLUTON is a soluble, nongelatinizing dietetic made from gelatin. Dose, 40 grams per day with fluid food. (Stir to a paste with a little water, add some more water, and heat gently until dissolved.)—Mfrs.: Aktien-Gesellschaft für Anilin-fabrikation, Berlin SO, Germany; agts.: Lehn & Fink, New York.

GLYBOLID is a paste consisting of 2 parts of glycerin and 1 part each of boric acid and acetanilid, employed topically on pustules, abscesses, and the like.

GLYCERIN SALICYLATE.—See *glycosal*.

GLYCERINOPHOSPHATES or GLYCEROPHOSPHATES.—See under *calcium, iron, lithium, magnesium, potassium, quinine, etc.*, glycerinophosphates.

GLYCERODINE (*glycerite hydriodic acid*) is said to contain in each 100 c.c. 1.54 grams of absolute hydriodic acid (equivalent to 7 grains in a fluid ounce). It is used as an alterative and resolvent. Dose, 1 fluid dram.—Mfrs.: H. K. Wampole Co., Philadelphia.

GLYCEROLE TRYPSIN is a 70 per cent. glycerin solution, containing approximately 5 per cent. of trypsin powder. It is prepared directly from the fresh pancreas of the hog. It is a yellowish to brownish, clear liquid, of sweetish taste and characteristic odor. It is intended for internal and hypodermic use in the treatment of cancer. Dose, 1 to 2 fluid drams three times daily; hypodermically, 5 minims every other day, gradually increased, depending upon the patient. This dose should be diluted with two to three volumes of sterile normal salt solution, using aseptic precautions and employing some local anesthetic.—Mfrs.: Armour & Co., Chicago, Ill.

GLYCERYLTRYPTOPHAN. See *fermentdiagnostic*.

GLYCINE is the name applied to what appears to be a mixture of extract of glycyrrhiza and fluid extract of yerba santa, flavored with oils of nutmeg and coriander, and used as a vehicle for quinine, cascara, opium and other nauseous drugs.—Mfrs.: Glycine Mfg. Co., New York.

GLYCOCOLL-PHENETIDINE HYDROCHLORIDE is better known as *phenocoll hydrochloride*, which see.

GLYCOCREOSOTE is an expectorant and anticatarrhal preparation each fluid dram of which is said to contain creosote carbonate 4 minims, terpin hydrate 2 grains, ammonium chloride 2 grains, heroin hydrochloride 1/24 grain, sodium glycerophosphate 1 grain, calcium glycerophosphate 1/2 grain, glycerin and flavoring q. s. Dose, a teaspoonful three to six times daily.—Mfrs.: Independent Pharmacal Co., Worcester, Mass.

GLYCOFORM or *glycoformal* is a mixture of 75 parts of solution of formaldehyde, 15 parts of water and 10 parts of glycerin. It is used for disinfecting purposes.—Mfrs.: Lingner & Kraft, Dresden, Germany.

GLYCOGEN (*animal starch*), $(C_6H_{10}O_5)_n + H_2O$, is a constituent of normal livers, muscles, blood, yeast, etc. It forms a yellowish-white, odorless and tasteless powder, soluble with opalescence in water and insoluble in alcohol. Though formerly only of physiologic interest glycogen has in recent years been recommended as a roborant and systemic bactericide in tuberculosis, typhoid fever, neurasthenia, etc. Dose, by mouth, 1 to 3 grains three times daily, as pills; subcutaneously, $\frac{1}{2}$ to 1 grain once daily; by enema, 5 to 10 grains.—Mfrs.: E. Fougere & Co., New York.

GLYCOGENAL is a substance closely related to glycogen, and occurring as a yellow powder soluble in water, and employed the same way as glycogen. Dose, per os, 4 to 8 grains twice daily; subcutaneously, 1 grain; by rectal injection, up to 30 grains with about 8 grains of ammonium carbonate.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

GLYCOGENE CLIN is the name of a 5 per cent. solution of glycogen in water.—Agts.: E. Fougere & Co., New York.

GLYCONDA is "a concentrated sugarless neutralizing cordial," analogous to the National Fomulary compound syrup of rhubarb and potassium.—Mfrs.: Lloyd Bros., Cincinnati, O.

GLYCOPHAL is a compound syrup of glycerinophosphates, containing the glycerinophosphates of calcium, sodium, potassium, magnesium and iron, together with pepsin and diastase. Dose, a teaspoonful to a tablespoonful.—Mfrs.: Squire & Son, London.

GLYCOPHENIN is a brand of *saccharin*.

GLYCOSAL is the trade name for *salicylic acid glycerin ester* or *ether*, also known as *glycerin salicylate*, $C_6H_4(OH)COO.C_3H_7(OH)_2$. The article forms a white powder readily soluble in alcohol, soluble in 100 parts of water, and moderately soluble in ether or chloroform, while being miscible with glycerin; alkalies and their carbonates readily saponify it. It is employed internally in place of sodium salicylate; also externally, as 20 per cent. alcoholic solution applied as a paint in articular rheumatism. Dose, 2 to 3 drams daily.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

GLYCOSINE is a brand of *saccharin*, claimed to be 550 times as sweet as cane sugar. Marketed by Fries Bros., New York.

GLYCOSOLVOL (*antidiabeticum*) is a diabetes remedy obtained "by mutual chemical action of oxypropionic acid ($C_3H_5O_3$) upon chemically pure peptone, and of sodium theobrominate upon the zymogen of the trypsin obtained from the pancreas of the sheep and the ox." It is marketed in two combinations that are used side by side: (1) glycosolvol with powdered jambul seed and aromatics, with which a decoction is prepared fresh each time a dose

is to be taken; (2) glycosolvol dissolved in a compound fluid extract of myrtle, the dose of which is a teaspoonful.—Mfr.: O. Lindner, Dresden, Germany.

GLYCOZONE, according to analyses made in the laboratory of the American Medical Association, is "a mixture of approximately 90 per cent. of glycerin, 5 per cent. of glyceric acid, a small amount of water and traces of undetermined matter. The absence of hydrogen peroxide or other peroxides was demonstrated." It is exploited as an antiseptic.—Mfr.: Brevet Mfg. Co. (Chas. Marchand), New York.

GLYKAOLIN is a product analogous to the official *Cataplasma Kaolini* (*Kaolin Poultice*); "a compound of aluminum silicate, salol and glycerin." Supplied also as *picrated glykaolin*.—Mfrs.: John Wyeth & Bro., Philadelphia, Pa.

GOLD COLLOIDAL. See *collaurin*.

GOMENOL is the essential oil of *melaleuca viridiflora*, and hence closely analogous to oil of cajuput. It is used internally, chiefly in phthisis and bronchial and laryngeal affections; externally, by inhalation or spray (10 to 50 per cent. strength), in respiratory ailments. Dose, 4 to 8 minims several times daily, in capsules or syrup. Marketed also as 0.5 gram capsules.—Mfrs.: Schimmel & Co., Miltitz, Germany; agts.: Fritsche Bros., New York.

GONOROL appears to be identical with *gonal*, *santalol*, and *arheol*, and is described under the latter title.—Mfrs.: Heine & Co., Leipzig, Germany.

GONORYL is the original name applied to capsules now called *blennorsan*.—See this title.

GONOSAN, also known as *kawa santal*, is a 20 per cent. solution of resin of kava kava in East India oil of sandalwood. It is marketed only as 0.3 gram capsules, 2 to 4 of which are given several times daily in gonorrhea.—Mfrs.: J. D. Riedel Co., Berlin (Germany) and New York.

GORIT is described under *calcium peroxide*.

GOUDROGENIN is a French dry wood-tar, occurring as brown chips or leaflets completely and readily soluble in water, forming therewith a solution possessing according to Dr. Goris all the properties of ordinary tar water.

GOUTINE or *goutinum* is a trade name applied to *sodium anhydromethylenecitrate*. The article is exploited as a gout remedy. Dose, 8 to 15 grains.—Mfrs.: Fritz-Petzoldt & Süß, Vienna, Austria.

GRAFOLIN is the name for an ointment base. It absorbs water readily and is marketed in the form of an emulsion, consisting chiefly of the alcohols and esters of wax and wool-fat.

GRAMININ is now better known as *graminol*.

GRAMINOL (*graminin*) is a polyvalent dry serum obtained from the blood of herbivorous animals during the flowering season of *gramineæ* (grasses). It is a hay-fever

antitoxin, used as a prophylactic and palliative. For the former purpose it is snuffed up once or twice daily for one or two weeks before the expected attack; during the attack it is used every four to six hours, and when going out it is used hourly. On the eye it is used as a powder; or it is made into a liquid with distilled water or physiologic salt solution.—Mfrs.: Serum Laboratory Ruete-Enoch, Hamburg, Germany.

GRISERIN is "loretin rendered soluble by the addition of alkalies and thus more suitable for internal administration"—probably *sodium loretinate* (or *sodium-loretin*). It has recently been brought forward as a remedy in tuberculosis, as well as diphtheria, scarlet fever and other infectious diseases, boils, etc. Experiments by Drs. Friedberger and Oettinger with it in tuberculosis have given negative results. Dose, 3 to 10 grains three times a day.—Mfrs.: Griserin Works, Berlin and New York.

GUACAMPHOL is the terse name for *guaiacol camphoric acid ester* or *guaiacol camphorate*, $C_6H_4(COO.C_6H_4.O.CH_3)_2$. The drug occurs as white needles without odor or taste; insoluble in water, moderately soluble in alcohol or chloroform. It is employed in tuberculosis, to arrest the night sweats and diarrhea. Dose, 3 to 15 grains at bedtime.—Mfr.: Dr. G. F. Henning, Berlin SW, Germany.

GUAIIACACODYL is a trade name for *guaiacol cacodylate*.

GUAIIACETIN or *guacetin* is the trade name for *sodium pyro (brenz) catechin-monoacetate* or *sodium phenone acetate*, $C_6H_4.OH.OCH_3.COONa$. The remedy occurs as a white, odorless, slightly bitter powder, which is soluble in 30 parts of water. It is employed in phthisis. Dose, $7\frac{1}{2}$ to 15 grains three times daily, as powder or tablets. Marketed also as 0.5 gram tablets. Little or nothing has been heard of the article the past few years.—Mfrs.: Drs. Von Gember and Fehlhaber, Weissensee, Germany; agts.: Fuerst Bros., New York.

GUAIIACODEINE (*codeine orthoguaiacolsulphonate*) occurs as a white, crystalline powder, soluble in about 90 parts of water and 450 parts of alcohol; slightly soluble in chloroform and insoluble in ether.—Mfrs.: N. Y. Quinine & Chem. Works, New York.

GUAIIACOL ACETATE (*guaiacol acetic acid ester*). See *eucol*.

GUAIIACOL BENZOATE is better known by the trade name *benzozol*, under which it is described.

GUAIIACOL BENZYLIC ETHER.—See *brenzocain*.

GUAIIACOL CACODYLATE (*cacodytiacol*) occurs as white, or reddish-white crystals, soluble in water, alcohol, glycerin or oil, insoluble in ether, and of pungent taste. It is used subcutaneously in oily solution in tuberculosis.

Dose, $\frac{1}{2}$ to 1 grain.—Mfr.: E. Merck and others. (Non-proprietary.)

GUAIACOL CAMPHORIC ACID ESTER is described under *guacamphol*.

GUAIACOL CARBONATE, also known by the trade name *duotal*, $(C_6H_5OCH_2)_2CO_2$, is now official and as such well known to pharmacists and physicians.

GUAIACOL CINNAMATE.—See *styracol*.

GUAIACOL ETHYLENATED, $CH_3O.C_6H_4.O.C_2H_4.OC_6H_4.OCH_3$, occurs as colorless needles, that are sparingly soluble in water but easily so in alcohol. It is prescribed in phthisis, like other guaiacol compounds. Dose, $7\frac{1}{2}$ to 15 grains two or three times daily.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

GUAIACOL ETHYLENE ETHER.—See *guaiacol ethylenated*.

GUAIACOL ETHYLGLYCOLATE. See *monotal*.

GUAIACOL-FORMALDEHYDE is referred to under *methylenediguaiacol*.

GUAIACOL ETHYL.—See *guethol*.

GUAIACOL GLYCERYL ESTER is *guaiamar*.

GUAIACOL-HEMOCOLADE. See *guaiacolade*.

GUAIACOL-iodoform is described as a solution of 1 part of iodoform in 4 parts of guaiacol and 1 part of almond oil; a reddish-brown, thick fluid, used diluted with 16 parts of olive oil by French physicians by injection in surgical tuberculosis and pleurisy—3 c.c. of the dilution per dose.

GUAIACOL MONOGLYCERINIC ETHER is referred to under its trade name, *oresol*.

GUAIACOL PHOSPHATE (*phosphoric acid guaiacyl ether*), $(C_6H_5COOCH_2)_3PO$, occurs as a white powder soluble in alcohol or chloroform but insoluble in water. It is an antitubercular. Dose, $1\frac{1}{2}$ to 3 grains three times a day. It is also better known as *biogaicol*.

GUAIACOL PHOSPHITE is described under its trade designation, *gaicophosphal*.

GUAIACOL PIPERIDINE.—See *guaiaperol*.

GUAIACOL SALICYLATE (*guaiacol salol*; *guaiacol salicylate*), $C_6H_5OCH_2.C_6H_4O_2$, forms a white, tasteless crystalline powder, of salol-like odor and soluble in alcohol, ether and chloroform, but insoluble in water. It is used as an antitubercular and intestinal disinfectant. Dose, 15 grains several times daily, up to $2\frac{1}{2}$ drams per day.—Mfrs.: Von Heyden, Radebeul, Germany; agts.: Merck & Co., and Schering & Glatz, New York.

GUAIACOL-SOMATOSE.—See under *guaiacose*.

GUAIACOL TANNO-CINNAMATE.—See *guatannol*.

GUAIACOL VALERIANATE is described under its trade name, *geosote*.

GUAIACOLADE ("guajacade") is *guaiacol-hemocolade* containing 5 per cent. of potassium sulphoguaiacolate.—Mfr.: Fritz Sauer, Berlin W, Germany.

GUAIACOLIN is another of the recently introduced syrups of potassium guaiacol-sulphonate or sulphoguaiacolate.

GUAIACOSE is the trade name adopted for *liquid guaiacol-somatose*, containing 5 per cent. of calcium guaiacol-sulphonate, and occurring as a dark-brown liquid miscible with water. It is offered as an expectorant, antiseptic and alterative, as well as a tonic and nutrient. Dose, 3 to 4 teaspoonfuls per day.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

GUAIACYL or *gajacyl* is calcium *ortha-guaiacolsulphonate*, $(C_8H_7[OH].[OCH_2]SO_3)_2Ca$; a bluish-gray powder soluble in water or in alcohol. Its 5 per cent. aqueous solution is violet-red, and is used hypodermically in quantities of 8 to 24 minims as a local anesthetic. Sometimes a 10 per cent. solution is employed.

GUAIADOL is the name applied by Mameli and Pinna to *para-iodoguaiacol*, a substance occurring as a colorless mass having a pleasant odor and very pungent taste. Dissolved in a mixture of equal parts of alcohol and glycerin, it is put forward as a hypodermic injection in tubercular sarcoma and in pulmonary tuberculosis.

GUAIIFORM (*geoform*) is referred to under *methylene-diguiacol*.—Mfr.: Dr. G. F. Henning, Berlin W, Germany.

GUAIALIN is defined as the "*benzoic acid ester of methylene-diguiacol*, the empiric formula of which is $C_{22}H_{18}O_4$." It occurs as an odorless, nearly tasteless, greenish powder, containing 60 per cent. of guaiacol. It is employed as an internal antiseptic and antitubercular. Dose, 10 to 30 grains several times a day. Also marketed as 5 grain tablets. See caution under *formaldehyde*.—Mfr.: Organic Chem. Co., Philadelphia, Pa.

GUAIAMAR is the trade name for *guaiacol glyceryl ester* or *glyceryl guaiacolate*, $C_8H_7.OCH_2.OC_2H_4O_2$. The drug occurs as a white powder, of bitter-aromatic taste; soluble in 20 parts of water, in alcohol, chloroform, or ether; decomposed by alkalis. It is prescribed as an intestinal antiseptic and antitubercular; occasionally in 25 per cent. ointment in acute articular rheumatism. Dose, 3 to 15 grains.—Mfrs.: Mallinckrodt Chem. Works, St. Louis, Mo.

GUAIAPEROL or *guaiaperon* is a trade name applied to *guaiacol-piperidine* or *piperidine guaiacolate*, $C_8H_7.NH.OH.C_4H_9OCH_2$. The medicament occurs as colorless crystals that are soluble in about 30 parts of water, soluble also in alcohol or ether, and decomposed by acids or alkalis. It is used chiefly in phthisis. Dose, 2 to 5 grains several times a day.

GUAIQUIN (*quinine guaiacol-bisulphonate*) is said to consist of equal molecules of quinine and guaiacolsulphonic acid; a yellow, bitter, sour powder, soluble in water, alcohol or diluted acids. It is prescribed as an antipyretic and antitubercular. Dose, 2 to 10 grains.—Marketed by McKesson & Robbins, New York.

GUAIQUINOL or *guaiakinol* or *gajachinol*, is chemically *quinine dibromoguaiacolate*, $C_6H_4Br_2(OCH_3)OHC_{20}H_{24}N_2O_2$, a substance freely soluble in water and combining the therapeutic properties of quinine, bromine and guaiacol and hence used as an antipyretic, sedative, and antitubercular. Dose, 8 to 20 grains.

GUAIASANOL.—See *gujasanol*.

GUAIOTOL is described as a "permanent, non-alcoholic syrup of guaiacol, containing 16 grains of guaiacol to the fluid ounce." Dose, 1 to 4 fluid drams.—Mfrs.: Davis Pharm. Co., New York. (Defunct.)

GUATANNOL or *guatannin* is chemically *guaiacol tan-cinnamate*, a substance insoluble in the usual solvents and employed in phthisis and bronchial catarrh in the form of 0.05 gram pills (so marketed), 2 to 10 at a dose.—Mfr.: Engel-Apotheke, Beuthen, Germany.

GUATHYMIN is a preparation exploited as a remedy in diseases of the respiratory organs. According to the manufacturer, it contains 7 per cent. of potassium guaiacolsulphonate, 4 per cent. of extract of thyme, and 2 per cent. of aromatic substances, together with honey and glycerin.—Mfr.: Apotheker G. Lepehne, Königsberg, Germany.

GUAYARSIN is a syrup containing in each 10 grams 0.005 gram of arsenous acid and 0.2 gram of guaiacol combined with cinnamic acid and calcium hydrochlorophosphate. It is used in consumption chiefly.—Mfr.: Dr. A. Kopp, Strassburg, Germany.

GUDERIN is the name applied to an elixir of iron and manganese peptonate analogous to the N. F. *solution iron peptonate with managanese*.—Mfrs. Dr. A. Gude & Co., Berlin, Germany.

GUETHOL, chemically *pyrocatechin monoethyl ether* or *guaiacol-ethyl* $C_6H_4.OC_2H_5.OH$, is known also as *ethacol*, *ajakol*, *homo-cresol*, and *thanatol*; a nearly colorless, oily liquid, of aromatic odor and crystallizing in the cold, and soluble in alcohol, ether or chloroform. It is intended as a succedaneum for guaiacol. Dose, 4 to 8 minims several times a day, in pills.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

GUIPSINE is the name applied to the active principle of gui (*viscum album*), an article intended for use in arterial sclerosis.—Mfrs.: Fritz-Petzoldt & Süß, Vienna, Austria.

GUJASANOL is the *hydrochloride of diethylglyccoll-guaiacol*, $C_6H_4.OCH_3.CO.CH_2.N.(C_2H_5)_2.HCl$, occurring as white crystals of faint guaiacol odor and a salty, bitter

taste, soluble in about 1 part of water, about 32 parts of alcohol and insoluble in ether. It is used in tuberculosis mainly, but to some extent locally as an antiseptic and deodorant in 1 to 2 per cent. solutions. Dose, 15 to 45 grains, in wafers, or subcutaneously in 20 per cent. solution. Incompatible with alkalis.—Mfrs.: Meister, Lucius & Brüning, Hoechst-on-M.; agts.: V. Koechl & Co., New York.

GURMIN is an antitoxic serum used in glanders of horses; it contains $\frac{1}{2}$ per cent. of carbolic acid as a preservative. Dose, subcutaneously, 25 to 50 c.c.—Mfrs.: Meister, Lucius & Brüning, as above.

GYNAICOL is the name applied to tablets of undivulged composition, intended for use in profuse menstruation.—Mfr.: W. Natterer, Munich, Germany.

GYNOCHRYSDIA HYDRARGYRI is described as a readily penetrating mercurial ointment containing 33 $\frac{1}{3}$ per cent. of metallic mercury in a mixed base consisting of cod liver oil, chaulmoogra oil, glycerin soap solution and peppermint oil, the latter having been added to cause hyperemia of the skin, and thus favor absorption of the ointment. The preparation is intended to replace mercurial ointment in the inunction treatment of syphilis. Dose, 45 to 60 grains per inunction.—Mfr.: Dr. R. Tscherne, Linz, Austria.

GYNOVAL is defined as the *isoborneol ester of isovaleric acid*. It occurs as a colorless, neutral liquid having a peculiar aromatic odor and a faintly oily taste. It is very sparingly soluble in water, but readily soluble in the other ordinary organic solvents. It is offered as a substitute for the customary valerian preparations. Marketed in pearls each containing 4 grains. Dose, 1 to 2 pearls.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

GYTJE is described as a sea sediment occurring in several Norwegian waters and as consisting of minerals, organic detritus and siliceous algæ. It is employed as a poultice in place of mud baths.

H

HABITINA is a preparation offered for the treatment of the morphine habit. According to Edw. Stieren (*Pharm. Centralh.*, 1910, No. 15), each 15 c.c. of it contains 0.5 gram of morphine sulphate and 0.25 gram of heroin hydrochloride.—Mfrs.: Delta Chem. Co., St. Louis, Mo.

HÆ compounds see hæ.

HAGEEN (*cremor hydrargyri saponatus*) is a soft mercurial ointment containing 33 $\frac{1}{3}$ per cent. of metallic mercury and marketed in graduated glass tubes. Used by inunction in syphilis.—Mfrs.: Werner & Co., Berlin NW, Germany.

HAIMAN (Müller) is a composite liquid hemoglobin preparation administered as a tonic and hematopoietic in doses of a teaspoonful to a tablespoonful.—Mfr.: A. Müller, Bad Kreuznach, Germany.

HALEN is a remedy exploited as a general tonic in disturbances of metabolism. It is a powder consisting, according to the manufacturers, of 30 per cent. of carbohydrates, 20 per cent. of albuminates, 10 per cent. of fat, 8 per cent. of casein, 2 per cent. of cholesterin, 15 per cent. of lecithin, 1 per cent. of fibrin, 2 per cent. of nuclein, 4 per cent. of gelatin and 8 per cent. of "various inorganic and organic substances."—Mfrs.: Katz & Leyboldt, Stettin, Germany.

HALOFORM is a menthol-formaldehyde preparation, which is used like forman in coryza. See caution under *formaldehyde*.

HARDIELLA is a disinfectant similar in composition to the official *solution cresol compound*.—Mfrs.: Nahnsen Bros., Hamburg, Germany.

HEALTH OIL and PAINT OIL are said to be pure natural products from Australia. They are exploited as agents for the treatment of rheumatism, asthma, etc.

HEBESIN is a dermatologic specialty exploited as a wrinkle-remover and skin rejuvenator. According to Dr. Aufrecht, it consists essentially of casein 15 parts, powdered alum 8 parts, talcum 4 parts, glycerin 4 parts and rosewater 70 parts.—Mfr.: E. A. Weidemann, Liebenburg, Germany.

HECTARGYRE is described as a compound of hectine and mercury, and is employed as an antiluetic hypodermically. Dose, 20 to 30 drops of a 1/10 per cent. solution daily.

HECTINE is defined as *sodium benzo-sulphopara-amino-phenylarsenate*. It forms long, colorless needles that are readily soluble in water, and its solutions may be sterilized by heat and are stable. It is offered as a less toxic succedaneum for atoxyl. Dose, 1 c.c. of a 1/10 per cent. solution, usually hypodermically. See caution under *sodium arsanilate* or *soamin*.

HEDONAL (*methylpropylcarbinol-urethane*), $C_8H_{13}O_2N$, occurs as a white powder sparingly soluble in water but readily soluble in the remaining organic solvents, and of faint aromatic odor and taste. It is incompatible with alkalies and their carbonates and bicarbonates. It is prescribed as a mild hypnotic. Dose, 15 to 30 grains, as powders or in capsules or tablets.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

HEFANOL is a new yeast preparation for use in boils, etc.—Mfrs.: Fritz-Petzoldt & Süss, Vienna, Austria.

HEIDYL, an antidiarrheal remedy, is said to consist of a compound fluid extract of myrtle berries 9 parts and

aromatic elixir 1 part.—Mfr.: Fr. Schulz, Leipsic, Germany.

HELCO SOL is described under *bismuth pyrogallate*.

HELFIN is a vermifuge prepared by Dieterich from oleoresin of male fern and castor oil, put up in capsules, and accompanied by a set of capsules containing oil of turpentine and castor oil.—Mfrs. Chem. Fabrik "Helfenberg," Helfenberg, Germany; agts.: Reinschild Chem. Co., New York.

HEL GOTAN is a *methylene-tannin compound* analogous to *tannoform* and used similarly. A *helgotan bromated* is also made.—Mfr.: Dr. A. Voswinkel, Berlin W, Germany.

HELIODONT is a mouth disinfectant and tooth-cleansing preparation, the active constituent of which is said to be magnesium peroxide.—Mfr.: Theo. Teichgraeber, Berlin, Germany.

HELIOFER is an emulsion of ferrous iodide and cod liver oil, containing $\frac{1}{4}$ per cent. of iron iodide.—Mfrs.: Löwen-Apotheke, Wildenfels, Switzerland.

HELKOMEN (Richter) is *bismuth dibrom-beta-oxynaphtholate* and is exploited as a substitute for iodoform. It occurs as a yellow, odorless, insoluble powder, containing 71 per cent. of metallic bismuth.—Mfr.: Gideon Richter, Budapest, Hungary.

HELMITOL (*urapurgol*) is chemically *hexamethylenetetramine anhydro-methylenecitrate*, $C_6H_{12}O_7(CH_2)_6N_4$, forming colorless crystals or white powder having an agreeable acidulous taste, soluble in about 10 parts of water, almost insoluble in alcohol and ether. It is used as a urinary disinfectant and acidifier, chiefly in cystitis, urethritis, and phosphaturia. Dose, 10 to 15 grains three or four times daily, in water. Acids slowly decompose it, alkalies very easily so, with the formation of formaldehyde. Helmitol is identical with *new urotropin*. See caution under *formaldehyde*.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

HEMABOLOIDS is a ferruginous tonic said to contain in each 100 c.c. 0.4 gram of iron combined with proteins and nucleoproteins 4 grams, bone marrow extract 5 grams, and nuclein 0.04 gram, in a menstruum containing 17 per cent. of alcohol by volume. Dose, $\frac{1}{2}$ fluidounce, children in proportion.—Mfrs.: Palisade Mfg. Co., Yonkers, N. Y.

HEMADUROL is represented to be an alcohol-free iron and manganese preparation.

HEMAFORMYL is a compound of hematoxylin and formaldehyde, intended for use as a gastrointestinal astringent and antiseptic as well as a vulnerary.—Mfr.: A. Klein, Berlin, Germany.

HEMALBUMIN (Dahmen) is an iron compound prepared from blood, consisting of hematin, hemoglobin, serum albumin and paraglobulin, together with the min-

eral salts of blood. It occurs as a blackish-brown powder of cinnamon odor and soluble in hot water and diluted alcohol. It is used as a blood builder. Dose, 15 to 30 grains thrice daily.—Mfr.: F. W. Klewer, Cologne, Germany; agts.: Lehn & Fink, New York.

HEMAMENINE is a French preparation analogous to the American utrolene and to the German hæmostypticum of Brueninghausen. The latter is said to contain the active constituents of ergot and of hydrastis.

HEMAN BAUM (*sangan*) is a liquid peptonized iron sulphocyanate (rhodanide), introduced as a readily absorbable iron preparation.—Mfrs.: Baum & Co., Hanau, Germany.

HEMANUTRID is a fluid form of *sanguino* (which seems to be inspissated blood), said to contain 70 per cent. of hemoglobin, 20 per cent. of glycerin, and 10 per cent. of cognac.

HEMAPOINE is an "easily assimilable blood-making tonic, indicated in all cases of anemia."

HEMAROBIN is a tonic and reconstructive, representing 25 per cent. of cod liver oil, combined with the hypophosphites of sodium, calcium, potassium, iron and manganese, and pepsin. Dose, 2 to 8 drams.

HEMARTOL is an iron preparation similar to hemato-gen and used like the latter.—Mfr.: Apotheker A. Müller, Kreuznach, Germany.

HEMATACID is a preparation analogous to hemalbumin.—Mfr.: Robt. Harras, Augsburg, Germany.

HEMATIN-ALBUMIN is a ferruginous albumin preparation consisting of dried blood-fibrin. It occurs as a fine, brownish-red, tasteless and odorless powder. It is given as a hematinic. Dose, 1 to 2 small teaspoonfuls three times daily in milk or water.—Mfr.: Apotheker Benzon, Copenhagen, Denmark.

HEMATOGEN (Hommel) is essentially germ-free evaporated blood obtained by a very tedious process. It is marketed only as an elixir containing in each pint 4 oz. of glycerin and 2 oz. of Malaga wine. It is intended as a "blood-builder." Dose, a teaspoonful to a tablespoonful two or three times a day before meals.—Mfrs.: Nicolay & Co., Hanau, Germany; agts.: Lehn & Fink, New York.

HEMATOL is a sterilized pure hemoglobin.

HEMATONIC is a hematinic each fluid ounce of which represents 40 grains of iron albuminate. Dose, a teaspoonful.—Mfrs.: Tilden Co., New Lebanon, N. Y.

HEMATOPAN is described as a blood preparation occurring in fine, ruby-red scales soluble in water to form a blood-red liquid, and admixed with 40 per cent. of malt extract to enhance its nutritive value and impart a pleasant odor and taste. It is exploited as a substitute for

hematogen as a hematinic.—Mfrs.: Sudbracker Nährmittelwerke, Bielefeld, Germany.

HEMICRANIN is a mixture of 5 parts of phenacetin, 1 caffeine, and 1 citric acid, and used as an analgesic and dental obtundent. Dose, 10 to 15 grains. Large doses have been given in jaundice.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

HEMINAL is a "blood-iron albuminate, free from fibrin, urea, and all excretory products, and containing 0.25 to 0.3 per cent. of metallic iron in soluble and assimilable form;" a dark-brown powder, of faintly acid taste. Dose, 5 to 15 grains thrice daily, in capsule or warm water.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

HEMINOL is said to consist of hemoglobin, paroglobulin and the phosphates of blood, but free from fibrin and urates.

HEMISINE is an English trade name for the active principle of the suprarenal capsule, marketed as solids and tablets. See *epinephrine*.—Mfrs.: Burroughs, Wellcome & Co., London and New York.

HEMOANTITOXIN is the name applied to a 20 per cent. solution of Prof. Maragliano's tubercle antitoxin. The article occurs as a clear, red liquid, containing besides the active antitoxin, alcohol, glycerin, hemoglobin and aromatics. Dose, a tablespoonful three or four times daily, before meals. It is advertised as specially serviceable as a prophylactic of tuberculosis.

HEMOFERROGEN is what Sneek calls an article obtained by shaking defibrinated blood with ether so as to remove the fat, evaporating in vacuo, drying and powdering; a dry, odorless powder, 150 grams of which correspond to 1 liter of hematogen.

HEMOFERRUM is an aromatic solution containing 4 grains of oxyhemoglobin to the teaspoonful. It is intended as a "blood-builder." Dose, 1 to 2 teaspoonfuls thrice daily.—Mfrs.: F. K. Stearns & Co., Detroit, Mich.

HEMOFORM is the name given by Libbertz to his hematogen, a reddish-brown powder soluble on stirring in water, and marketed in dry, inspissated and liquid forms.—Mfr.: Apotheker Libbertz, Hamburg, Germany.

HEMOGALLOL is derived from hemoglobin by reduction with pyrogallol, and occurs as a reddish-brown, insoluble powder. It is advertised as an assimilable organic iron compound. Dose, 4 to 8 grains before meals, in powders with sugar or as 4-grain tablets (marketed also as such).—Mfr.: S. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

HEMOGEN is a "neutral, aromatic solution of peptonized manganese and iron, with free pepsin and hemoglobin;" a "blood-producer," given in doses of a teaspoonful to a tablespoonful three or four times a day, before meals.

HEMOGLOBIN (*hematocrystalline*) is the red coloring matter of blood. It occurs as a brownish-red powder or scales, soluble in water. It is employed as a hematinic. Dose, 5 to 30 grains.—(Nonproprietary.)

HEMOL is hemoglobin deoxidized by zinc, a dark-brown insoluble powder employed as a "blood-builder" in doses of 2 to 8 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

HEMOL, ARSENATED.—See *arsenhemol*.

HEMOL BROMIDE is described under *bromohemol*.

HEMOL, CUPRATED.—See *cuprohemol*.

HEMOL, IODIZED, is referred to under *iodohemol*.

HEMOMALTIN or *oxyhemoglobin-maltose* is stated to consist of the active constituents of hematogen and of malt.—Mfr.: P. Hentschel, Zwönitz, Germany.

HEMOPHOSPHIN TABLETS "contain per tablet the natural blood iron present in a teaspoonful of blood and phosphoric acid in organic combination." They are offered as a roborant and hematinic.—Mfr.: Dr. K. Aschoff, Bad Kreuznach, Germany.

HEMOPLASE is a preparation derived from blood plasma, forming an agent in what A. and L. Lumiero call "plasmatherapy," which is based on the following principles: Inasmuch as protoplasm is the site of the production of the "antibodies," it is the most important factor in the protection of the system. It would hence be rational to look in protoplasm for the active substances hitherto found occasionally in blood serum. The investigators named have thus far occupied themselves chiefly with blood-plasma therapy and prepared a protoplasm extract from blood cells which they designate as hemoplase. The latter occurs as a reddish liquid that keeps unchanged at least a year when preserved in hermetically sealed tubes of 10 c.c. capacity, which quantity constitutes the dose by intramuscular injection every two or three days in cases of tuberculosis. The same experimentors are now engaged in preparing other plasma preparations, such as hepatoplase, nephroplase, splenoplase, myoplase, etc.

HEMOPROTAGON or *hematoprotagon* is a compound of lecithin (8.3 per cent.) and hemoglobin, marketed as tablets.—Mfrs.: Chem. Institute, Berlin S W, Germany.

HEMOQUININE is said to contain in each 100 c.c. iron peptonate 7.2 grams, manganese peptonate 1.8 grams, quinine peptonate 1 gram (equivalent to 0.5 gram of quinine sulphate) and sodium arsenate 0.266 gram, in a menstruum containing 20 per cent. of alcohol with glycerin, and aromatics. This is offered as a hematinic and alterative. Dose, 2 fluid drams.—Mfrs.: Schieffelin & Co., New York.

HEMOSE is dried, pepsinized and hydrochlorated blood-albumin; a light reddish-brown, almost odorless and taste-

less powder, soluble in alkaline solutions. It contains 0.286 per cent. of iron, 0.17 per cent. of phosphoric acid, besides the natural constituents of blood. Dose, a teaspoonful two or three times daily, in cold milk; hot liquids must be avoided.—Mfr.: Dr. Herman Stern, Berlin O, Germany.

HEMOSERSIN is said to be a sterilized solution of formaldehyde in normal solution of sodium chloride. See caution under formaldehyde.

HEMOSTAN is a hemostatic marketed as tablets said to contain fluidextract of hydrastis, extract of hamamelis, extract of cotton-root bark, a small quantity of quinine, and powdered hydrastis. Dose, 3 tablets three times daily.—Mfr.: Drs. Grohs & Feigely, Vienna, Austria.

HEMOSTASIN is a brand of the active principle of the suprarenal capsule, an article described under the title *epinephrine*.—Mfrs.: Schweitzerisches Serum- und Impf-Institut, Basle, Switzerland.

HEMOSTAT is a Swiss nosebleed remedy consisting of quinine sulphate, tannic acid, and benzoinated lard.—Mfrs.: C. F. Hausmann, St. Galen, Switzerland.

HEMOSTATIN of this market is a 1:1000 solution of the active constituent of the suprarenal gland. (See *epinephrine*.) Abroad the name applies to a *tribromophenol-bismuth* like xeroform but containing less bromine.—Mfrs.: H. K. Wampole Co., Philadelphia, Pa.

HEMOSTOGEN (Loeffler) is a blood preparation in which the albumins of the blood have undergone digestion and which also contains glycerophosphates. It is prescribed as a hematinic and nerve nutrient.—Mfrs. Chem. Fabrik "Rhenania," Aix-la-Chapelle, Germany; agts.: Merck & Co., New York.

HEMOSTYPTIC (Brüninghausen) is a fluid extract of a mixture of two parts of ergot and one part of golden seal, prepared with alcohol, ether and glycerin, in vacuo under pressure. It contains 2.6 per cent. of total alkaloid, and is given as an internal hemostatic in the dose of 30 drops four times daily.—Mfrs.: Engel-Apotheke, Cologne, Germany.

HEMOTROPHIN is a generic name for a line of hemoglobin preparations containing also glycerinophosphates—plain, arsenated, ferrated, gualacolated, and iodized hemotrophin.

HEMOTROPHIN, ARSENATED, is a hemoglobin preparation containing 0.005 per cent. of arsenic.

HEMOTROPHIN GUALACOLATED and HEMOTROPHIN IODIZED are also marketed.—Mfr.: C. H. Hausmann, of St. Galen, Switzerland.

HEMOZOL is a brand name of *iron nucleinate*.

HENRIETTOL, also designated as *creosote-calcium oxy-sulphuret*, is a tuberculosis remedy marketed as dragees.

In the system it is said to give off hydrogen sulphide that destroys the virulence of the bacilli, and to form CaOCl , which latter, it is maintained, imparts alkalinity and resisting power to the blood.—Mfr.: Dr. E. Budai, Budapest, Hungary.

HEPARADEN is a dried extract of pig's liver, 1 part of which represents 2 of the fresh organ. It is used chiefly in jaundice. Dose, 30 to 60 grains thrice daily, as tablets.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

HEPARON.—See under *tannin-organotherapeutic preparations*.

HEPATIX is a diuretic mixture: "each fluid ounce represents hepatica 64 grains, epigæa repens 48 grains, potassium nitrate 16 grains, oil gaultheria 16 minims, spirit juniper and aromatics q. s."—Mfr.: Norwich Pharmacal Co., Norwich, N. Y.

HEPATONE is a granular effervescent sodium phosphate containing 50 per cent of crystalline sodium phosphate and $\frac{1}{2}$ grain of phenolphthalein per dram. Dose: 2 to 4 drams.—Mfr.: H. K. Mulford Co., Philadelphia, Pa.

HEPPTINE is defined as being a "pure physiologic gastric juice bottled by Dr. Maurice Hepp."—Mfrs.: Laboratories of Applied Physiology of France, New York.

HERARD'S SERUM.—See *Serums Artificial*.

HERBACOL is what Herbabays calls his syrup of lime and iron with the addition of potassium gualacol-sulphonate. It is intended for use as an antitubercular and as a general tonic in scrofula and other cachetic conditions. Dose, 1 to 2 teaspoonsfuls.—Mfrs.: Apotheke zur Barmherzigkeit, Vienna VII, Austria.

HERITIN MARPMANN is a liquid extract of the root of heritiera, containing about 45 per cent. of alcohol, and without special taste or odor. Dose, 5 to 10 drops before breakfast, in migraine, nervousness, etc.—Mfr.: G. Marpmann, Lepsic, Germany.

HERITINE is an ether-soluble alkaloid isolated by Gehe from heritiera javanica, which is indigenous to the Sunda islands. It is said to act as an anodyne and nerve-sedative, but no dose statements are given.—Mfrs.: Gehe & Co., Dresden, Germany.

HERMITINE is a French disinfectant solution said to be obtained by the electrolysis of sea water.

HERMOPHENYL is the name adopted for *mercury-sodium phenoldisulphonate*, $\text{C}_6\text{H}_3\text{OHg}(\text{SO}_3\text{Na})_2$, which occurs as a white powder containing about 40 per cent. of mercury, soluble in 5 parts of water, and insoluble in alcohol. It is used as an antiseptic, in 0.1 to 2 per cent. solutions, and internally and by intramuscular injection in syphilis. Dose by mouth, $\frac{1}{4}$ to $\frac{1}{2}$ grain thrice daily; by injection, 30 to 60 minims of a 1 per cent. solution *once a*

day.—Mfrs.: Soc. Anonyme des Produits Chim. Specieux, Lyons, France.

HERNIARIN $C_{24}H_{40}O_{10}$, is a glucoside of herniaria glabra, believed by Grein to be the active principle and a strong diuretic.

HEROIN and **HEROIN HYDROCHLORIDE** are trade names for *acetyl-morphine* and its hydrochloride respectively.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

HEROLINE is a 33 $\frac{1}{3}$ per cent. emulsion of petrolatum, containing besides in each fluid ounce heroin hydrochloride 1/16 grain, calcium hypophosphite 8 grains, and sodium hypophosphite 8 grains. It is used mainly in phthisis and chronic bronchitis.—Mfrs.: English & McLarty, Charlotte, N. C.

HEROMAL is a tonic and cough sedative each 100 c.c. of which is said to contain heroin 0.01625 gram and sodium hypophosphite 0.375 gram, in a menstruum of malt extract with 6 per cent. of alcohol. Dose, 2 fluid drams.—Mfrs.: Schieffelin & Co., New York.

HEROTERPINE is a cough sedative and anticatarrhal each 100 c.c. of which is said to contain terpin hydrate 1.625 gram and heroin 0.0325 gram, in a menstruum containing 32 per cent. of alcohol with glycerin and aromatic essential oils. Dose, 2 fluid drams.—Mfrs.: Schieffelin & Co., New York.

HERZHEIL BATHS are carbonic acid baths consisting of perforated tins containing a nucleus of solidified acid surrounded by a carbonate. It is claimed that this arrangement prevents caustic action and at the same time assures equable slow formation of gas. The baths are supplied also with rubefacient, aromatic and ferruginous additions respectively.—Mfrs.: Henri Laaser, Berlin, SW, Germany.

HETOCRESOL is *cinnamyl-meta-cresol* or *meta-cresol cinnamic acid ester*, and occurs as a white to yellowish powder, insoluble in water but soluble in chloroform, ether or hot alcohol. It is used locally in surgical tuberculosis, as dusting powder, or as ethereal spray with or without iodole or iodoform.—Mfrs.: Kalle & Co., Biebrich, Germany; agts.: Lehn & Fink, New York.

HETOFORM is *bismuth cinnamate*, which see.

HETOL is a trade name for the chemical *sodium cinnamate*.—Mfrs.: Kalle & Co., Biebrich, Germany; agts.: Lehn & Fink, New York.

HETOL-CAFFEINE is a trade name for *caffeine sodium cinnamate*, which see.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

HETOL-SANGUINAL Pills contain besides sanguinal 1 milligram of hetol (sodium cinnamate) each, and are used in tuberculosis—1 gradually increased to 6 daily.—Mfrs.:

Krewel & Co., Cologne, Germany; agts.: Lehn & Fink, New York.

HETRALIN is the trade name applied to *dioxybenzene-hexamethylenetetramine* or *resorcin-hexamethylenetetramine*, $C_6H_4(OH)_2(CH_2)_6N_4$, which occurs as white, permanent needles that are soluble in 14 parts of water and contain 60 per cent. of hexamethylenetetramine (urotropin, formin, etc.). Dr. R. Ledermann introduced the article as a urinary disinfectant like hexamethylenamine. Dose, 8 grains three or four times a day. See caution under *formaldehyde*.—Mfrs.: Chas. Zimmermann & Co., Hamburg, Germany.

HEXAMETHYLENAMINE (*hexamethylenetetramine*) is official in the U. S. P. It is also known by various trade names—*aminoform*, *ammonio-formaldehyde*, *cystamine*, *cystogen*, *formin*, *hexamine*, *uristamine*, *uritone*, *urotropin*, etc. See caution under *formaldehyde*.

HEXAMETHYLENAMINE ANHYDRO-METHYLENE CITRATE is better known as *helmitol* and *new urotropin*, and is described under the former title.

HEXAMETHYLENAMINE BROMETHYLATE is a synonym of *bromalin*; see this title.

HEXAMETHYLENAMINE CITRO-SILICATE. See *silin*.

HEXAMETHYLENAMINE GALLATE.—See *galloformin*.

HEXAMETHYLENAMINE METHYLENE-CITRATE is claimed to be the same substance as *helmitol* or *new urotropin*. It is made by a Swiss firm.

HEXAMETHYLENAMINE OXYMETHYLSULPHONATE is referred to under its trade name, *thial*.

HEXAMETHYLENAMINE OXYQUINOLINATE. See *hexaquinol*.

HEXAMETHYLENAMINE SALICYLATE.—See *sali-formin*.

HEXAMETHYLENAMINE TRIBORATE. See *borover-tin*.

HEXAMETHYLENAMINE AND SODIUM ACETATE.—See *cystopurin*.

HEXAMINE is one of the numerous trade names for *hexamethylenamine*.—Mfrs.: Larned & Barker, Syracuse, N. Y.

HEXAQUINOL (*hexachinol*) is *hexamethylenamine oxyquinolate*, and is intended chiefly for use in the treatment of gonorrhea. Marketed by Parmele Pharmacal Co., New York.

HEXOS is a trade name applied to *compound capsules of hexamethylenamine*, each capsule containing "hexamethylenamine 2 grains, copaiba 3 minims, oleoresin saw palmetto 3 minims, oil sandalwood 3 minims, oleoresin

cubeb 3 minims, oil nutmeg $\frac{1}{4}$ grain and olive oil q. s." The article is used as a genitourinary antiseptic and antiphlogistic. Dose, 1 to 2 capsules three times daily.—Mfr.: H. K. Mulford Co., Philadelphia, Pa.

HIPPOL is what A. Nicolaier, the introducer of urotropin, calls *acid methylene-hippuric*, which product is however, not really an acid, but probably an ester of hippuric acid, of the constitution $C_6H_5.CO.N:(CH_2)_2.CO.O$. It forms colorless, odorless and tasteless prisms, soluble in about 500 parts of water and readily soluble in chloroform. It is recommended as an urinary disinfectant, readily splitting off formaldehyde in the system. Dose, 15 to 30 grains three or four times daily. See caution under *formaldehyde*.—Mfr.: E. Schering, Berlin, Germany; agts.: Schering & Glatz, New York.

HIRUDIN is a preparation of the leech, said to contain the constituent of leeches' heads that inhibits coagulation of the blood, 1 milligram of which suffices permanently to keep 7.5 c.c. of blood uncoagulated without affecting its composition. It occurs as brown scales or masses, soluble in water but insoluble in alcohol or ether. It is used in certain diseases of women, generally $\frac{1}{6}$ grain dissolved in 30 minims of distilled water or physiologic salt solution; also technically.—Mfrs.: E. Sachsse & Co., Leipsic, Germany; agts.: C. Bischoff & Co., New York.

HISTOGENOL is a mixture of 5 parts of disodium methylarsenate and 20 parts of nucleinic acid derived from herrings. It has been recommended by French physicians in tuberculosis.—Mfr.: Dr. A. Mouneyrat, Paris, France; agts.: E. Fougere & Co., New York.

HISTOGENOL NALINE is the name of a compound said to contain arsenic and phosphorus "organically combined." It seems to be identical with "nuclarrhine," which is a condensation product of nucleopsarin with methyl arsenate.

HISTOSAN is an antitubercular, the chief constituent of which is a gualiacol-albumin compound designated as trigualiacol albuminate. It is insoluble in water or alcohol, but soluble in alkali solutions. Dose, 4 to 8 grains. Marketed also as *histosan syrup*.—Mfrs.: Fabrik Chem. Diät-Produkte, Schaffhausen, Germany; agts.: C. Bischoff & Co., New York.

HOLADIN ("*extractum pancreaticum integrum*") is described as "an extract of the entire pancreas containing all the constituents of the gland and exhibiting great potency in respect to the several known enzymes—trypsin, amyllopsin, lipase and rennin." It occurs as a grayish-white, slightly aromatized, somewhat hygroscopic powder, freely but not wholly soluble in water. Holadin digests starch and proteids and emulsifies fats, and is hence used as a general digestant. It is furnished only in 3-grain capsules. Dose, 1 to 3 capsules about three hours

after meals and at bedtime.—Mfrs.: Fairchild Bros. & Foster, New York, N. Y.

HOLOCAINE HYDROCHLORIDE (*phenetidylacetphenetidin hydrochloride*), $C_{18}H_{22}N_2O_2 \cdot HCl$, occurs as a white, odorless, bitter powder, soluble in 50 parts of water, and freely soluble in alcohol. It is used as a local anesthetic, like cocaine, chiefly on the eye (1 per cent. solution). It is extremely sensitive to alkalis, hence its solutions should be made in porcelain capsules and kept in porcelain containers or in bottles that have been treated with hydrochloric or sulphuric acid (to remove the alkali present in the glass as far as possible) and thoroughly rinsed in distilled water; only distilled water should be used.—Mfrs.: Meister, Lucius & Brüning, Hoechst-on-M., Germany; agts.: V. Koechl & Co., New York.

HOMOCRESOL is a synonym of *guethol*; see this title.

HOMOFERRINE is a blood preparation exploited as a hematinic.—Mfrs.: Laboratories "Optima," Brussels, Belgium.

HOMORENONE HYDROCHLORIDE is chemically defined as *ethylaminoacetpyrocatechin hydrochloride*. It resembles the natural active principle of the suprarenal capsule, but is said to be much less poisonous. It occurs as a white, fluffy powder, or as colorless, delicate needles that melt at $260^{\circ} C.$, are readily soluble in water and less freely soluble in alcohol. It is used in 50 per cent. solution similarly to the 1:1000 solution of epinephrine.—Mfrs.: Meister, Lucius & Brüning, Hoechst, Germany; agts.: V. Koechl & Co., New York.

HONTHIN is a keratinized tannin albuminate used as an intestinal astringent; a grayish-brown odorless, tasteless, insoluble powder, slowly decomposed by alkalis. Dose, 15 to 30 grains several times daily.—Mfrs.: G. Hell & Co., Troppau, Austria.

HOPOGAN is the German equivalent of *biogen*.—Mfrs.: Kirchoff & Neirath, Berlin N, Germany.

HORMONES is the collective name applied by Prof. Schaefer of Edinburgh University to the active principles of the animal extracts—extracts of the thyroid and parathyroid glands, the suprarenal capsule and the pituitary body.

HORSINE is the fanciful name given to muscle plasm or juice of the horse, exploited in France as a remedy for use in tuberculosis.

HUMANOID is described as a "concentrated humanized milk," intended as a food for infants.

HUMINAL is a fluid, alkaline bog-earth extract used locally in rheumatism, gout, etc.—Mfrs.: Bade-Verwaltung in Alt-Heide, Germany.

HUSINOL is another trade name by which *ennan* tablets, described in these pages, are known.—Mfr.: B. Braun, Melsungen, Germany.

HUXSAL is described as "a double salt, partially a chemical combination and partially a mechanical mixture of antiseptic materials, which in 2 per cent. solution is equal to mercury bichloride as a germicide."—Mfrs.: E. Fougere & Co., New York.

HYDRA-CASCA COMPOUND is a bitter tonic and alterative, each fluidounce of which is said to represent $\frac{1}{4}$ grain of hydrastis, 24 minims of fluidextract of cascara sagrada, $\frac{1}{4}$ grain each of gentian and ginger, 16 minims of fluidextract of senna, 15 grains of cubeb, and 8 grains each of sodium and potassium hypophosphites.—Mfrs.: Sbarum Chem. Co., New York.

HYDRACETIN.—See *acetylphenylhydrazin*.

HYDRAGOGIN is a vegetable diuretic consisting of "tincture of digitalis 1.5 parts, tincture of strophanthus 2.5 parts, scillipicrin and scillitoxin, the active principles of squill, and 0.5 part of oxysaponin;" a dark-brownish liquid which foams on being shaken. Dose, 7 to 15 drops every three or four hours, in sweetened water.—Mfr.: Karl Raspe, Weissensee, Germany; agts.: C. Bischoff & Co., New York.

HYDRARGOL is a trade name for *mercury succinimide*, marketed in tubes containing 1 c.c. of solution corresponding to 7 milligrams of metallic mercury. The article is said to cause no pain when injected intramuscularly.—Mfrs.: Tardieu & Co., Paris.

HYDRARGOLENT is the collective name adopted for soft capsules of mercurial ointment 50 per cent. and 33 $\frac{1}{3}$ per cent., marketed in soft capsules holding 3, 4 and 5 grams each of either strength ointment. These capsules are intended as a cleanly and convenient means of carrying out the inunction treatment of syphilis.

HYDRARGOTIN is a brand name for *mercury tannate*.—Mfrs.: G. Hell & Co., Troppau, Austria.

HYDRARGYROL is *mercury para-phenolsulphonate* $C_6H_4.OH.SO_3Hg$; reddish scales, of peppermint odor and soluble in water and glycerin. It does not react with the ordinary tests for mercury or phenol nor coagulate albumin. It is recommended as a substitute for corrosive sublimate.

HYDRARGYROSEPTOL is described as a compound of chinisol-mercury with sodium chloride, of the formula $C_9H_9N.O.SO_3.Hg+2NaCl$. It occurs as an odorless mass that swells up in water. It is offered as an antisymphilitic. Mfrs.: Franz Fritsche & Co., Hamburg; agts.: Parmele Pharmacal Co., New York.

HYDRASTINE, $C_{21}H_{21}NO_6$, is the white alkaloid of *hydrastis canadensis* (golden seal), now official.

HYDRASTININE BITARTRATE is a new salt of hydrastinine, employed as a uterine hemostatic in doses of $\frac{1}{2}$ to 1 grain.—(Nonproprietary.)

HYDRASTONE is "an alkaline digestive representing the digestant properties of hydrastis, xanthoxylum, etc., in alkaline medium." It should not be mistaken for hydrastine, the white alkaloid of hydrastis.

HYDROCAFFEINE. See *hydroxycaffeine*.

HYDROCERIN is an ointment base consisting of wax, petrolatum, and water.

HYDROCINE is a pancreatized compound syrup of various essential oils, thymol, and cinnamic aldehyde, extolled for use in tuberculosis.—First marketed by Hydrocine Co. (defunct), New York, later by Oxydase Co., New York.

HYDRO-CRESOL is a product similar to lysol and the official *liquor cresolis compositus*. It is said to contain 51 per cent. of the natural mixture of the three isomeric cresols.—Mfrs.: White Tar Co., New York, N. Y.

HYDROGEN PEROXIDE POWDER is the designation applied to a compound said to have the composition $B_2O_3Na_2 \cdot 2H_2O_2$, 25 grams of which dissolved in 1 liter of water at ordinary temperature yield a solution containing between 2 and 3 per cent. by volume of H_2O_2 . For stronger solutions warm water is required. The solubility is increased by magnesium or potassium sulphate.

HYDRON is a chalybeate and bitter tonic, each fluid ounce of which represents fluid extract hydrastis 24 minims, iron glycerophosphate 4 grains, fluid extract collinsonia (green root) 24 minims, fluid extract avena sativa 30 minims, combined with wine. Dose, a dessertspoonful to a tablespoonful.—Mfr.: Wm. S. Merrell Chem. Co., Cincinnati, O.

HYDRONAL is an obsolete name for *viferral*.

HYDRONAPHTHOL is a brand name for betanaphthol as marketed by Seabury & Johnson, New York.

HYDROPYRINE is the trade name for *sodium acetylsalicylate*, put forward as an internal antirheumatic in place of acetylic-salicylic acid (aspirin), over which it has the advantage of being soluble in water.—Mfr.: Gideon Richter, Budapest, Hungary.

HYDROSOL is an aqueous solution of collargol (colloidal mercury).

HYDROXYCAFFEINE (*hydrocaffeine*) is obtained by causing alcoholic potassa to act upon chlorocaffeine and boiling the resulting product with hydrochloric acid. It is identical with trimethyluric acid, and occurs as delicate, fleecy needles that are readily soluble in hot water, as well as in acids, alkali carbonates and sodium benzoate, and sparingly soluble in alcohol. Dr. E. Starkenstein has employed it dissolved in 5 per cent. sodium benzoate solution as a diuretic. It is likely that the double salt hydroxycaffeine and sodium benzoate will soon be max-

keted.—Mfrs.: C. F. Boehringer & Soehne, Mannheim, Germany; agts.: Merck & Co., New York.

HYDROZOL is a generic name applied to a line of preparations which are claimed to contain hydrogen peroxide "firmly combined" as their active constituent. Hydrozol paste, for dermatological uses, consists of a gelatin base that is claimed to carry the peroxide in undecomposed state for an unusually long time. Hydrozol pastilles are also made with a gelatin base and are intended for internal use.—Mfrs.: Söhnlin & Queisser, Altona, Germany.

HYGIAMA is a dietetic and nutritive composed of milk, malt, wheat flour, cacao and sugar. Dose, a teaspoonful to a tablespoonful, according to age.—Mfr.: Dr. Theinhardt, Cannstadt, Germany.

HYGIENOL is defined as a compound of cresol and sulphurous acid. It occurs as a blackish-brown liquid having a sulphurous odor and readily soluble in water. It is intended for use as an antiseptic and disinfectant.—Mfrs.: Chem. Fabrik "Vahrenwald," Vahrenwald, Germany.

HYGIOPON is an iron preparation, made electrolytically. It forms a clear greenish-yellow liquid with an acid reaction and contains, according to Bischoff, 22 per cent. of ferrous chloride, 3.6 per cent. of ferric chloride, 2.8 per cent. of sodium chloride and 6.67 per cent. of free hydrochloric acid. The preparation has apparently no advantage over a ferrous chloride solution prepared in the regular way.—Mfrs.: Berliner Electrochemische Werke, Berlin W, Germany.

HYGROSCOPINE is an antiseptic poultice analogous to the official cataplasm of kaolin and to various other preparations of that nature on the market.

HYMOSA, according to the manufacturers, contains "frangula, actea spicata, stellaria media, franciscea uniflora, rhus toxicodendron, passiflora incarnata, phyto-lacca decandra and echinacea angustifolia, combined in the proportions which experience has shown will obtain the quickest and best results without any of the stomach and heart complications so often following the administration of salicylic acid. . . . It contains no salicylic acid. It has achieved results in overcoming rheumatism in cases where salicylates have been tried in vain." However, according to a recent analysis at the laboratory of the American Medical Association, the article not only contains sodium salicylate but also free salicylic acid, and appears to have approximately the following composition: salicylic acid 0.32 gram; sodium salicylate 1.15 grams; potassium iodide 0.32 gram; sugar and plant extractives 4.6 grams; alcohol 16.86 c.c.; and water to make 100 c.c. It is exploited as an antirheumatic and antineuralgic. Dose, a tablespoonful. Mfrs.: Walker Pharmacal Co., St. Louis, Mo.

HYOS-SCO-PHINE Tablets are said to contain hyoscyamine, scopolamine, piperidine, pilocarpine, caffeine and morphine, and are exploited for use in the treatment of narcotic drug addictions.—Mfrs.: Combs Chem. Co., St. Louis, Mo.

HYPERIDAL 606 is Prof. Ehrlich's latest syphilis remedy, the outcome of further investigations on the lines that lead to the discovery of his "606" (dioxydiamidoarsenobenzol). It is said to be only one-third as toxic as the latter. It is put up in tubes labeled "Hy." This remedy, as well as its predecessor, will be made by Meister, Lucius & Brüning, Hoechst, Germany, and marketed here by V. Koechl & Co., New York.

HYPNAL is the terse name for *chloral-antipyrin*, or *monochloral-antipyrin*, $\text{CCl}_3\text{CH}(\text{OH})_2\text{C}_{11}\text{H}_{12}\text{N}_2\text{O}$; colorless crystals, soluble in 15 parts of water. It is used as a hypnotic and analgesic. Dose, 15 to 30 grains, one to three times daily.—Mfrs.: Meister, Lucius & Brüning, Hoechst-on-M.; agts.: V. Koechl & Co., New York.

HYPNALGINE is an antipyretic and anodyne described by the makers as a coal-tar product, occurring in white, crystalline powder of slightly sweetish taste and soluble. Its chemical composition is not fully stated. Dose, 5 to 15 grains. Marketed also as 5-grain tablets and in combinations.

HYPNOACETIN is chemically *acetophenone-acetyl-para-amidophenol ether*, a condensation product of para-acetamidophenol with phenol and glacial acetic acid. It occurs as shining leaflets readily soluble in water, insoluble in alcohol, and employed as an antipyretic and hypnotic. Dose, 3 to 5 grains.

HYPNOPYRIN, originally defined as a chlorine derivative of quinine, is, according to French authorities, a mixture of certain quinine salts. It is very bitter, and soluble in water, alcohol, and acids. Dose, 4 to 8 grains thrice daily.

HYPODERMINE is a liquid marketed in sealed glass tubes, each of which contains 0.02 gram of sodium methylarsenate and 0.05 gram of sodium glycerophosphate. It is employed hypodermically, in certain obstinate skin and nervous affections.—Mfrs.: Pharmacie "Freyssinge," Paris, France.

HYPONONE (*acetophenone, phenyl-methylketone, or benzoyl-methide*), $\text{C}_6\text{H}_5\text{CO.CH}_3$, occurs as a colorless, oily liquid, of pungent taste, specific gravity 1.028, and soluble in alcohol, ether, chloroform, or oils; insoluble in water. It acts as a hypnotic, but is not often prescribed nowadays. Dose, 2 to 6 minims, in capsules or emulsion. It becomes crystalline on exposure to a low temperature.—(Non-proprietary.)

HYRGOFERMENT is a trade name for *colloidal mercury* (known on this market as *hyrgol*).

HYRGOL (*colloidal or soluble mercury, mercury colloid*) is a nearly black, tasteless substance, quite freely though not completely soluble in water, insoluble in alcohol or ether. It is used as a succedaneum for the mercurials internally as well as by inunction (10 per cent. ointment). Dose, $\frac{1}{2}$ to $\frac{3}{4}$ grain thrice daily, in pills; children, 3 to 20 drops of a 1 per cent. solution.—Mfrs.: Chem. Fabrik von Heyden, Radebeul, Germany; agts.: Schering & Glatz, New York.

HYSTEROL is another trade name applied to *bornyl valerianate*; see *bornyval* for properties, etc.—Mfrs.: G. Pohl, Schönbaum, Germany.

I

IALINE is advertised as "a liquid disinfectant containing 25 per cent. of tar acids, besides other antiseptic properties."—Burt, Boulton & Haywood, London, E.

IATROL is a "combination of iodine with coal tar derivatives" introduced as a succedaneum for iodoform as a wound antiseptic; a grayish-white, odorless powder. It is said to be *oxyiodomethylanilid*.—Mfrs.: Bristol-Myers Co., Brooklyn, N. Y.

IBIT is chemically *bismuth oxyiodotannate*; a greenish-gray, odorless, tasteless, insoluble powder, used like iodoform as a wound antiseptic.—Marketed by A. Klipstein, New York.

IBOGAINE HYDROCHLORIDE, $C_{22}H_{33}N_3O_2.HCl$, is the salt of an alkaloid obtained from the root of *iboga tabernanthe*, an apocynaea indigenous to the western coast of tropical Africa. It has been recommended by French physicians as a powerful nervine of service in neurasthenia, influenza, cardiac affections, and sleeping sickness. Dose, daily, $\frac{1}{8}$ to $\frac{1}{2}$ grain, in dragees or pills.

ICHDEN (*piscarol*) is the name of a Swiss brand of the Ph. Helv. ammonium sulphoichthyolicum (claimed to be identical with ichthyol).—Mfrs.: Lüdy & Co., Burgdorf, Switzerland.

ICHNOL is a greenish liquid recommended for toothache. It consists of an alcoholic solution of oil of cloves and other essential oils, colored green with chlorophyll.

ICHTHALBIN (*ichthyol albuminate*) is a compound of ichthyol and albumin, 4 parts of which correspond to 3 parts of commercial ichthyol. It occurs as a grayish-brown, odorless, nearly tasteless powder, insoluble in the usual solvents. It is used chiefly as a succedaneum for ichthyol internally, but also as a vulnerary (pure). Dose, 10 to 30 grains two or three times daily. Marketed also as 5-grain tablets.—Mfrs.: Knoll & Co., Ludwigshafen-on-Rh. and New York.

ICHTHERMOL (*ichthyol-mercury, mercury sulphoichthyolate*) is a dark, odorless powder, insoluble in water and intended as a wound antiseptic as well as internal antisiphilitic. It contains 24 per cent. of mercury.—Mfrs.: Ichthyol Co., Hamburg, Germany; agts.: Merck & Co., New York.

ICHTHOCALCIUM. See *ichthyol-calcium*.

ICHTHOFERRIN is synonymous with *ferrichtol*.

ICHTHOFORM (*ichthyol-formaldehyde*) is a blackish-brown, almost odorless and tasteless, pulverulent, insoluble compound of ichthyol and formaldehyde, used chiefly as an intestinal disinfectant, but to a limited extent as a wound antiseptic. Dose, 15 to 30 grains three or four times a day, in wafers or powders. Applied externally pure or diluted with talcum, etc. (See caution under *formaldehyde*).—Mfrs.: Ichthyol Co., Hamburg, Germany; agts.: Merck & Co., New York.

ICHTHOGEN is another product stated to be the same as ichthyol.

ICHTHOLDINE is a "*comopund glycerite of ichthyol*," and astringent and antiphlogistic, "each fluid ounce of which contains ichthyol 4 grains, iodine 1 grain, solution phenol [liquefied phenol?] 4 minims, hydrastine hydrochloride 1/32 grain, boroglyceride 9 grains, and eucalyptol 1/20 minim."—Mfr.: H. K. Mulford Co., Philadelphia, Pa.

ICHTHOLITHIUM. See *ichthyol-lithium*.

ICHTHOSIN is a compound of ichthyol and eosin intended to yield flesh-colored skin ointments.

ICHTHOSODIUM. See *ichthyol-sodium*.

ICHTHOSOTE PILLS each contain 1½ grains of ichthyol and ⅔ grain of creosote carbonate flavored with peppermint oil. Used in tuberculosis.

ICHTHOZINCUM. See *ichthyol-zinc*.

ICHTHYNAT (*ammonium ichthynatum*) is analogous to *ichthyol*, but made by Chem. Fabrik von Heyden, Radebeul, Germany. Agts.: Heyden Chemical Works, New York; Mallinckrodt Chem. Works, St. Louis.

ICHTHYODIN is a synonym of *isarol*, which see.

ICHTHYOL is a drug defined as "*ammonium sulphoichthyolate*" yet not sufficiently characterized chemically and the source of which is the distillation product of a bituminous shale; a thick, brown, liquid, of disagreeable bituminous odor and taste, and somewhat variable composition—according to reports, containing besides the active constituent about 50 per cent. of water, 5 to 7 per cent. of ammonium sulphate and 1 per cent. of a volatile oil to which the penetrating odor is due. It is soluble in water, insoluble in undiluted alcohol or ether, and miscible but not soluble in glycerin or oils. It is used, as is known,

mostly in skin diseases and gynecological affections, pure or in 5 to 10 per cent. ointments, paints, etc., and to a small extent also internally in phthisis, rheumatism, etc. (It has a horrid taste and produces disagreeable eructations). Dose, 3 to 30 minims three times daily, in capsules or pills. Ichthyol gives precipitates with metallic salts, acids, and alkaloidal salts, and is decomposed by alkali hydrates and carbonates, and by iodine in ointment form. *Ichthyol tablets* "contain 97.5 per cent. of sulpho-ichthyolic acid and 2.5 per cent. of calcium," and are odorless and almost tasteless.—Mfrs.: Ichthyol Co., Hamburg, Germany; agts.: Merck & Co., New York.

ICHTHYOL ALBUMINATE.—See *ichthalbin*.

ICHTHYOL-AMMONIUM is the regular *ichthyol* of the market.

ICHTHYOL, AUSTRIAN, is *petrosulfol*.

ICHTHYOL-CALCIUM is marketed as "ichthyol tablets," and contains 97.5 per cent. of ichthyol-sulphonic acid and 2.5 per cent. of calcium.

ICHTHYOL-FORMALDEHYDE.—See *ichthoform*.

ICHTHYOLIDIN (*ichthyol-piperazin*, *piperazin sulpho-ichthyolate*) is a blackish-brown powder, of faint tarry odor and bitter, unpleasant taste, and almost insoluble in the usual solvents. It was introduced by Dr. F. Dorn as a gout remedy. Dose, 15 grains three or four times daily, in 0.25 gram sugar-coated tablets (so marketed).—Mfrs.: Ichthyol Co., Hamburg, Germany; agts.: Merck & Co., New York.

ICHTHYOL-IRON.—See *ferrichtol*.

ICHTHYOL-LITHIUM (*lithium ichthyolsulphonate* or *sulphoichthyolate*) is a dark-brown mass thicker than ichthyol," and used like it, but more readily made into pills than the latter.—Mfrs.: Ichthyol Co., Hamburg, Germany; agts.: Merck & Co., New York.

ICHTHYOL-MERCURY is described under its trade name *ichthermol*.

ICHTHYOL-PIPERAZIN.—See *ichthyolidin*.

ICHTHYOL-SALICYL is the generic name for three ichthyol mixtures containing respectively 25, 33 $\frac{1}{3}$, and 50 per cent. of sodium salicylate, and occurring as light-brown to dark-brown hygroscopic powders or masses not clearly soluble in water; they are used in rheumatism, tuberculosis, etc., externally and internally. Dose of 50 per cent., 15 to 30 grains per day.

ICHTHYOL-SALICYL ABSORPTION PILLS each contain $\frac{1}{4}$ grain of citrated caffeine and 3 grains of ichthyol-salicyl, together with vegetable diuretics.—Mfrs.: Engel-Apotheke, Mühlheim, Germany.

ICHTHYOL-SILVER is better known as *ichthargan*.

ICHTHYOL-SODIUM (*sodium ichthyolsulphonate* or *sulphoichthyolate*) is a dark-brown mass thicker than reg-

ular ichthyol, and contains about 15 per cent. of sulphur. In action and uses are the same as those of ichthyol, but it can be made into pills more readily and is the article used in the ichthyol pills marketed.—Mfrs.: Ichthyol Co., Hamburg, Germany; agts.: Merck & Co., New York.

ICHTHAMMON is the name adopted for a German product purporting to be identical with ichthyol.—Mfr.: F. Reichelt, Breslau, Germany.

ICHTHARGAN (*ichthyol-silver, silver sulphoichthyolate, silver thiohydrocarburosulphonate*) occurs as a brown, odorless, hygroscopic powder, containing about 30 per cent. of silver, and soluble in water, glycerin or diluted alcohol, but insoluble in chloroform or ether. It is used as an astringent, antiphlogistic, and bactericide, mostly in 1/5 to 5 per cent. solutions or 1 to 10 per cent. ointments, or pure. Dose, 1/24 to ¼ grain, in solution. Its solutions should be dispensed in amber-colored bottles.—Mfrs.: Ichthyol Co., Hamburg; agts.: Merck & Co., New York.

ICHTHARGOL is another brand of *silver sulphoichthyolate*, containing 12 per cent. of metallic silver. It occurs as a brown, odorless powder, insoluble in water. It is used like ichthargan.

ICHTHARSOL is a combination of ichthyol and arsenic, exploited as a dermic.

ICHTHYOL-ZINC is the zinc salt of ichthyolsulphonic or sulphoichthyolic acid, with properties analogous to the ammonium salt (regular ichthyol).—Mfrs.: Ichthyol Co., Hamburg, Germany; agts.: Merck & Co.; New York.

ICHTHYOPON is what a Swiss firm calls its *ammonium sulphoichthyolate* (ichthyol) of the Swiss Pharmacopœia.—Mfrs.: Lüdy & Cie, Burgdorf, Switzerland.

ICHTOSAN is another of the numerous imitations of ichthyol.

IDONAFTAN is "a naphtha ointment similar in action to naftalan." It contains 3 per cent. of iodine, and forms a blackish-brown soft ointment of pleasant odor.—Mfr.: Apotheker Brandt, Hamburg-Altona, Germany.

IDONEEN is defined by its manufacturers as an aqueous organic solution of iodine containing 1½ grains of iodine in each fluid dram. It is extolled as a substitute for the alkali iodides. It occurs as a dark-red, practically odorless liquid that is clearly miscible with water. Dose, 10 to 60 minims, according to age, thrice daily, in water.—Mfrs.: Iodoneen Chem. Co., Cleveland, O.

IGAZOL is a mixture of paraformaldehyde and some iodine compound, used by Prof. Cervello by inhalation in phthisis. It is vaporized in a special apparatus; under the influence of heat formaldehyde and iodine are given off. Two to 9 grams are used to an ordinary room. See

caution under *formaldehyde*—Mfr.: Prof. Cervello, Palermo, Italy.

IGLODINE is described as a solution of triiodoethyl phenol and is recommended as a substitute for iodoform.—Mfr.: Fritz-Petzoldt & Süss, Vienna, Austria.

IMIDIOD is obtained by heating para-ethoxy-phenyl-succinimide with potassium iodide and iodine in diluted acetic acid, and occurs as a blackish powder that is used as a wound antiseptic like iodoform.

INDOFORM (*salicyl-methylene acetate*) is obtained by the action of formaldehyde upon acetyl-salicylic acid, and occurs as a white powder, of sweetish, astringent taste, sparingly soluble in cold water. In the intestine it is said to liberate formaldehyde, and is intended for use especially in gout, rheumatism, influenza and neuralgias. Marketed as 0.5 gram tablets, 1 to 3 of which are taken thrice daily with meals. See caution under *formaldehyde*.—Mfr.: Fritz Schultz, Leipsic, Germany.

INFANTIN is a German infant food.—Mfr.: Apotheker Ringler, Aschaffenberg, Germany.

INFLUENZIN is said to be a mixture of acetphenetidin, quinine salicylate, caffeine and sodium chloride.

INGESTOL is said to have the following composition: magnesium sulphate 2.5 parts, sodium sulphate 1.5 parts, potassium sulphate 1 part, magnesium chloride 0.5 part, sodium chloride 0.7 part, effervescent iron citrate 0.01 part, spirit of ether 0.1 part, glycerin 1.5 parts, aromatic water 100 parts. An earlier published formula contained also calcium sulphate, sodium carbonate, magnesium bromide, calcium carbonate, sillicic acid and ferric oxide. It is used as a carminative and laxative. Dose, a tablespoonful; children in proportion.—Mfr.: G. T. B. Richter, Berlin SO, Germany.

INGLUVIN is said to represent the digestive ferment of the gizzard of the domestic chicken. It is offered as a digestive and stomachic. Dose, 5 to 15 grains. It is marketed as powder and in the form of tablets.—Mfrs.: Wm. R. Warner & Co., Philadelphia, Pa.

INHALONE is an inhalant of ointment consistency, and is composed of phenol, eucalyptol and menthol in a petrolatum base, agreeably aromatized, and supplied in a collapsible tube with elongated tip to facilitate its introduction into the nostrils.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

INJECTION DURANTE, used in tuberculosis, is said to consist of iodine 1 part, expressed oil of almonds 90 parts, and guaiacol 9 parts.

INJECTION HIRSCH is a stable solution containing 1 per cent. of mercury oxycyanide and $\frac{1}{2}$ per cent. of acoin, used as a local anesthetic.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

INTESTIN is described as a mixture of naphthalin (50), bismuth benzoate (50) and vanillin ($\frac{1}{2}$), that is used as an intestinal antiseptic in doses of 8 to 15 grains several times a day.—Mfrs.: Kronen-Apotheke, Berlin, Germany.

INTOLIN is a trade name for powdered beer yeast marketed by Petzoldt & Süß, Vienna, Austria.

IOCASIN is an organic compound of iodine, albumin and casein. It is intended as a substitute for the iodides internally where these are not borne well.—Mfr.: P. Weinreich, Davos-Platz, Germany.

IODALBACID (*iodized albumin*) is an iodine substitution compound of albumin, containing 10 per cent. of iodine. It occurs as a yellowish powder, soluble in water, and is used in place of alkaline iodides internally. Dose, 15 to 45 grains thrice daily in tablets.—Mfr.: Wilh. Gans, Frankfort-on-M., Germany; agts.: Mathieson & Co., New York.

IODALBIN is a new organic compound of iodine with blood albumin, containing about 21.5 per cent. of iodine. It occurs as a reddish-brown powder, almost tasteless and having a molasses-like odor. It is practically insoluble in water or diluted acids, but soluble with decomposition in alkaline liquids such as the intestinal secretion. It is intended to replace the alkali iodides. Dose, 5 to 15 grains. Supplied also in 5-grain capsules. Mfrs.: Parke, Davis & Co., Detroit, Mich.

IODALGIN is the name applied to a French odorless, water-soluble succedaneum for iodoform, containing 50 per cent. of iodine.

IODALIA is a saccharated iodine-tannin compound of French manufacture. It occurs as yellow, vermiform concretions, of a faint balsamic odor and purely sweet taste, soluble in water, and containing 1.2 per cent. of iodine. It is intended as an efficient yet pleasant form of iodine for internal administration in cases of syphilis, scrofula, arterio-sclerosis, tuberculosis, etc. Dose, 1 to 2 teaspoonfuls three times a day.—Mfr.: M. Pelvillo, Paris, France; agt.: G. J. Wallau, New York.

IODALOSE is a standardized solution of iodopeptone (peptonized iodine), used in place of the iodides internally.—Mfr.: Pharmacie "Galbrun," Paris, France.

IODAMYL is *iodized starch*.

IODAMYLOFORM is a compound of starch, formaldehyde and iodine, and is used as a wound antiseptic. See caution under *formaldehyde*.

IODAN is defined as a solution of iodine in goose oil (*adeps anserini*), introduced by Dr. E. H. Shields as a readily penetrating and easily assimilable iodine preparation for topical as well as internal use. It is marketed in two strengths: 10 per cent., designed for external use; and 25 per cent., intended for internal use, and supplied in

5-minim and 10-minim capsules, 4 to 12 of which constitute the ordinary daily dose.—Mfrs.: Eusoma Pharm. Co., Cincinnati, O.

IODANTIPYRIN.—See *iodopyrin*.

IODARGYRUM is *mercury iodocacodylate*, supplied both as a syrup and as a sterilized solution put up in ampuls.

IODARSOTROPIN is said to be a mixture of iodine, arsenic and belladonna, marketed in tablet form.

IODARSYL is marketed in ampuls each containing a solution of 6 grains of sodium iodide and 1/64 grain of sodium para-amidophenylarsinate. It is used intravenously in syphilis.

IODCALLISTAN is defined as "a chemical compound of iodine with vegetable mucilage," and is exploited as a succedaneum for the alkali iodides.

IODCARTAN and **IOTAN.**—See under *nebulates*.

IODEIN is *codeine diiodide*.

IODELLA is the name applied to a cod-liver oil containing 0.2 per cent. of ferrous iodide, suitably flavored.—Mfr.: Wilh. Lahnsen, Bremen, Germany.

IODIL, defined as "iodine hydrate," occurs as white, odorless scales that are soluble in about 5 parts of water. It is offered as a succedaneum for the alkali iodides internally, and is given in similar doses.

IODIN is defined as an "ester of propyldiiodooleic-acid-moniodo-arachinic acid." It is obtained by causing iodine vapor to act on purified peanut oil. It is a blackish, oily liquid smelling of fat and having an unpleasant taste. Dr. Castelloi considers it a good iodine preparation that only occasionally produces symptoms of iodism.

IODINE SCLEROSIN is antisclerosin with 10 per cent. of sodium iodate, and is designed more especially for syphilitic atheroma of the arterial system. Dose, 2 to 4 tablets three times a day.—Mfr.: Wm. Natterer, Munich, Bavaria (Germany).

IODINE TRICHLORIDE, ICl_3 , occurs as a yellow, volatile, deliquescent powder, of very irritating odor, and soluble in water or alcohol. It is occasionally prescribed as an antiseptic solution or as an antifermentative; externally, in 1:1000 to 1:200 solution; internally, in the dose of a teaspoonful of a 1:1000 solution. Its solution should be dispensed in dark-amber bottles.

IODINE-VASOGEN.—See under *vasogen*.

IODIPALMS are iodized fat preparations, analogous to iodipin and containing 10, 20, and 30 per cent. of iodine respectively. They are employed as succedanea for the alkali iodides—subcutaneously, internally or by enema. Dose per os (10 per cent.), 1 to 4 drams in emulsion, thrice daily.

IODIPIN is an iodine addition product of the fatty acids of sesame oil containing 10 per cent. of iodine, and occur-

ring as a thick, yellow to brownish-black oil. It is prescribed as a substitute for the alkali iodides where these are not borne well. The ordinary dose is 1 to 4 fluid drams three or four times a day. (See also *iodipin solid*.)—Mfr.: E. Merck, Darmstadt; agts.: Merck & Co., New York.

IODIPIN PHOSPHORIZED (*phosphorus-iodipin*) is 10 per cent. iodipin containing 0.0033 per cent. of phosphorus.

IODIPIN SOLID (*iodipin emulgate*) is a dry form of iodipin (iodized sesame oil) introduced by Dr. L. Sarason, combined with roborat. It occurs as grayish-yellow to yellowish scaly mass, which is described as tasteless, odorless and permanent in air and light, and containing 40 per cent. of 25 per cent. strength iodipin (equivalent to 10 per cent. of iodine). It is intended for use as an alternative and antisyphilitic where an intensive or long-continued iodine action is desired and the alkali iodides are not well borne. Dose, 30 to 60 grains three times daily.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

IODIPIN VETERINARY is another and cheaper product for veterinary use.

IODIVAL is *mono-iodo-valeryl-urea*, $(\text{CH}_3)_2\text{CH}.\text{CH}.\text{CO}.\text{NHCONH}_2$. It is a white powder which is insoluble in cold water, but soluble in hot water and alcohol. It contains 47 per cent. of iodine and is offered as a substitute for the iodides. Dose, 5 to 15 grains.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

IODIZED OIL ("iodöl") is an iodized olive oil containing 7.6 per cent. of iodine and recommended as a succedaneum for the alkali iodides. It is employed internally as well as subcutaneously.

IOD-NEOL is a new iodine preparation in the form of a blackish-brown ointment. It consists, according to Vogtherr, of neutral fats, medicinal soap, lanolin, free iodine, sodium iodide, organically combined iodine and water. It is marketed in two strengths of iodine: 6 per cent. and 10 per cent.—Mfr.: C. Boer, Berlin NO, Germany.

ODOACETONE is a solution of 2 parts of iodine in 5 of acetone, recommended by Prof. Chantemesse locally in place of iodine tincture, particularly in the treatment of boils. When freshly made it looks like iodine tincture, but in a fortnight it becomes black and thick. A new product is more irritating than an old one.

IODOBENZINOFORM is a 1:1000 solution of iodine in benzinoform (carbon tetrachloride). It is intended as a protection to the surgeon's hands against infection.

ODOCAFFEINE is what Dr. Rumno calls *caffeine and sodium iodide*; a white, odorless, water-soluble powder containing 65 per cent. of caffeine and combining the actions of iodine and caffeine but used chiefly as a diuretic and cardiac stimulant. Dose, 4 to 8 grains.—Mfr.: E.

Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

IODOCASEIN is defined as "a chemical compound of iodine with casein, containing approximately 18 per cent. of iodine. It is a brownish-yellow powder, practically odorless and tasteless." It is brought forward as a succedaneum for the alkali iodides.—Mfr.: H. K. Mulford Co., Philadelphia, Pa.

IODOCATECHIN is a compound of iodine and catechin as made by a German firm and identical with the French *neoside*. It contains about 13 per cent. of iodine, is permanent in light but decomposed by acids.

ODOCHLOROFORM is a 5 per cent. to 6 per cent. solution of iodine in chloroform, recommended by Dr. Gomolu as a hemostatic for external use.

IODOCIN is one of the many succedanea for iodoform.—Mfrs.: Otis, Clapp & Son, Boston, Mass.

IODOCOL or *iodokol* is a compound of iodine and gualacol that is used in phthisis, chronic bronchitis, etc., in doses of 3 to 6 grains four or five times a day.—Mfrs.: Urban & Kremers, Milwaukee, Wis.

IODOCRESINE.—See *traumatol*.

IODOCROL (*carvacrol iodide*), $C_{10}H_{12}OI$, is analogous chemically to thymol iodide (*aristol*) but is made from carvacrol instead of thymol. It occurs as a light, odorless powder, soluble in ether, chloroform and oils, and is used as a substitute for iodoform.

IDO-EIGON.—See under *eigons*.

IDO-ETHYLENE is described under *diiodoform*.

IDO-EUGENOL (*eugenol iodide*) was introduced by E. Liotard as a succedaneum for *aristol* of more powerful disinfectant action. It forms a reddish powder, of slight eugenol odor, insoluble in water, slightly soluble in alcohol, and quite readily so in ether and fatty oils.

IDOFAN is defined as *mono-iodo-dioxybenzene-formaldehyde*, $C_6H_3I(OH)_2.HCOH$. It occurs as an odorless, tasteless, reddish-brown powder, containing, according to Dr. Zernik, about 4 per cent. of iodine; soluble in most of the ordinary solvents. It is put forward as a surgical antiseptic, a succedaneum for iodoform. See caution under formaldehyde.—Mfrs.: Goedecke & Co., Berlin; agts.: Schering & Glatz, New York.

IDOFERRATIN is ferratin with 6 per cent. of iodine; a reddish-brown, neutral powder, which is prescribed in scrofula, rickets and other ailments in which iodine and iron are indicated. Dose, 4 to 10 grains.—Mfrs.: C. F. Boehringer & Soehne, Mannheim, Germany; agts.: Merck & Co., New York.

IDOFERRATOSE is a 5 per cent. syrup of idoferratin, intended to replace syrup of ferrous iodide. Dose (adult),

tablespoonful two to four times daily.—Mfrs.: as preceding.

iodo-fersan PASTILLES each contain 0.1 gram of potassium iodide and 0.4 gram of fersan. (See *fersan*.)—Mfrs.: Fersan-Werke, Vienna, Austria.

iodoformal (*iodoformin-ethyl iodide*) results from the action of iodoformin on ethyl iodide, and forms a heavy, yellow powder of faint iodoform odor and intended for use like iodoform. See caution under *formaldehyde*.—Mfr.: Dr. C. Marquardt, Beuel, Germany.

iodoform ALBUMINATE.—See *iodoformogen*.

iodoform-ANILIN is a solution of iodoform in pure anilin ("anilin oil"), recommended by Dr. A. A. Gray in suppurating ear catarrh; 4 or 5 minims (not more) are introduced on cotton two or three times a week, the pledgets being removed in five minutes. It should be kept in dark-amber bottles; when of a crimson color from age, it is unfit for use.

iodoform-CALOMEL is a mixture of equal parts of iodoform and calomel, used as a vulnerary particularly on syphilitic sores.—(Nonproprietary.)

iodoform, LIQUID, is described as a compound of iodoform with alkali oleate, occurring as a water-soluble liquid. It is intended for use as an external alternative and vulnerary, and particularly for the preparation of iodoform gauze and other wound dressings.—Mfr.: Max Arnold, Chemnitz, Germany.

iodoformin is *iodoform-hexamethylenetetramine*, $\text{CHI}_3(\text{CH}_2)_6\text{N}_4$; a whitish powder, with a slight iodoform odor, and insoluble in water, alcohol, or ether. It contains 75 per cent. of iodoform, which is liberated on contact with wound secretions. It is used as a wound antiseptic. See caution under *formaldehyde*.—Mfr.: Dr. C. Marquardt, Beuel, Germany.

iodoformin ETHYL IODIDE is *iodoformal*.

iodoformogen (*iodoform albuminate*) is a fine, yellow powder, smelling slightly of iodoform, of which it contains 10 per cent. combined with albumin. It is used as a dusting powder on wounds in place of iodoform.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

iodogallicin is chemically defined as *bismuth oxyiodomethylgallate*, and occurs as a light, dark-gray, odorless powder, containing about 23 per cent. of iodine and 38 per cent. of bismuth, and insoluble in the usual solvents. It is intended as a drying wound antiseptic like aïrol.—Mfrs.: Sandoz & Co., Basle, Switzerland.

iodogelatin or *iodized gelatin* Bruschelli prepares with 3 parts of gelatin, 2 potassium iodide, $1\frac{1}{2}$ iodine, 100 water, 2 sodium hypophosphite, and 2 calcium hypophosphite. It is a clear, colorless liquid, recommended as a well-borne iodine compound for internal use. Dose, 15 to 60 minims several times daily.

IODOGENOL is described as a compound of peptonized albumin and iodine, intended as a substitute for the alkali iodides internally where these are not tolerated. Dose, 10 to 30 minims several times a day, in water.

IODOGLIDINE (*iodized glidine*) is an organic combination of iodine with the vegetable albumin glidine. It is insoluble in water, slightly acted upon by dilute acids, but soluble with decomposition in alkali solutions. It is offered as an efficient succedaneum for the alkali iodides. It is marketed only as tablets, each of which represents $\frac{1}{4}$ grain of iodine. Dose, 1 to 3 tablets three or four times a day.—Mfrs.: V. Klopfer, Dresden-Leubnitz, Germany; agts.: Menley & James, New York.

IODOGLOBULIN.—See *thyroglandin*.

IODOGLYZIN is a substance of unctuous consistence, the chief constituents of which are kaolin, iodine and glycerin, and which is intended as an application to sluggish ulcers of the leg, over the chest in pectoral affections, etc. Its use seems to be identical with that of the official kaolin cataplasm.

IODO-GUAIACOL TABLETS consist of guaiacol carbonate, strontium iodide, arsenic iodide, iron and manganese peptonate, pepsin and nux vomica, and are used in phthisis. Supplied in "full" and "half" strengths. (See also *iodocol*).—Mfrs.: Fox-Brumley Pharm. Co., Denver, Colo.

IODO-HEMOCOLADE. See *iomacolade*.

IODOHEMOL or *iodized hemol* occurs as a brown, insoluble powder, containing 16 per cent. of iodine. It is used as an alterative in place of potassium iodide. Dose, 3 to 10 grains three times daily, in pills.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

IODOLE (*tetraiodo-pyrrole*), C_4I_4NH , is one of the oldest of the modern succedanea for iodoform, and now official in the U. S. P.

IODOLE CAFFEINATED is said to be a chemical compound of iodole and caffeine, containing 74.6 per cent. of iodole and 25.4 per cent. of caffeine. It is intended for use like iodole.

IODOLECITHIN RICHTER is an iodized lecithin containing about 28 per cent. of iodine. It occurs as a dark-brown, ointment-like mass, which is not soluble in water but readily soluble in oils, ether or chloroform. It is employed as an alterative, mainly in syphilis and scrofula. Dose, 2 to 8 grains three times a day, in pills.—Mfr.: Gedeon Richter, Budapest, Hungary.

IODOLECITHIN RIEDEL is an iodized lecithin containing 7 to 8 per cent. of iodine. It forms a brownish-yellow, wax-like mass resembling lecithin; readily soluble in ether and warm alcohol, swelling in water, and decomposed by alkalis into chlorine, glycerino-phosphoric acid

and iodized fat acids. It is used chiefly in scrofula and syphilis. Dose, 3 to 10 grains.—Mfrs.: J. D. Riedel Co., Berlin (Germany) and New York.

IODOLEN (*iodole-albumin*) is a yellowish, coarse, odorless, tasteless powder, insoluble in the usual solvents. *Iodolen externum* contains 36 per cent. of iodole, and is used as a dusting powder on wounds. *Iodolen internum* contains 10 per cent. of iodole, and is used instead of alkali iodides. Dose, 10 to 30 grains thrice daily. Keep well-stoppered.—Mfrs.: Kalle & Co., Biebrich, Germany; agts.: Lehn & Fink, New York.

IODOLIN, $C_6H_7NCH_2Cl.ICl$, results from the interaction of quinoline iodomethylate and iodine chloride in solution with hydrochloric acid. It forms a yellow powder, soluble in alcohol, insoluble in water, and is used in place of iodoform on wounds.

IODOMAISIN is what Vaudin calls an iodine-albumin compound, derived from the so-called "maisín," the albumin of wheat. It forms a yellowish-white, hygroscopic, bitter, water-soluble mass. It is intended for use like the iodides, in tertiary syphilis and other diseases in which iodine is indicated. Dose, daily $1\frac{1}{2}$ to 3 grains.

ODO-MANGAN is "ferromangan with 1 per cent. of iodopeptone." (Iodopeptone contains 15 per cent. of iodine.) It is used as a hematinic tonic and anticachectic, in scrofula, rickets, etc. Dose, 1 to 4 fluid drams, according to age, three times a day.—Mfrs.: Chem. Fabrik, Helfenberg, near Dresden, Germany; agts.: Reinschild Chem. Co., New York.

IODOMENINE is described as an albumin and bismuth iodide compound obtained by the action of bismuth iodide on egg albumin. It occurs as a tasteless and odorless powder, containing 10 per cent. of iodine, and is not soluble in acid liquids, but readily decomposed in the presence of dilute alkaline liquids. It is intended for use as a substitute for the alkali iodides.—Mfrs.: A. Wülfing, Berlin SW, Germany; agts.: Bauer Chem. Co., New York.

IODOMUTH is defined as *bismuth oxyiodo-methylenedigallate* of the formula $Bi_2I_2C_{10}H_{12}O_{12}$, and occurs as a reddish-brown, fine, odorless, tasteless powder, containing about 25 per cent. of iodine. It is prescribed as a drying wound antiseptic, externally, similar to iodoform, and as an astringent internally (phthisical diarrhea chiefly). Dose, 5 to 30 grains. See caution under *formaldehyde*.—Mfr.: Organic Chem. Co., Philadelphia, Pa.

IODONAFTAN is an iodized naphtha product, an ointment similar to naftalan, and containing 3 per cent. of iodine. It is employed in skin diseases.

IODONE is a periodide of phthalic anhydride, $(C_6H_4C_2O_3)_2KI.I_4$. It occurs as dark-green prismatic crystals, decomposed by water and other solvents. It contains about

51 per cent. of iodine. It is not marketed in the pure state, but only as *iodone dusting-powder*, a mixture of 4 parts of iodone and 96 parts of talcum; *iodone oil*, a 2 per cent. solution of iodone crystals in a mixture of alcohol, castor oil and cottonseed oil, and *iodone ointment*, containing 4 per cent. of iodone. All these preparations are offered as wound antiseptics and cicatrizants.—Mfrs.: Hy. C. Blair Co., Philadelphia, Pa.

IODONE is also the name applied to a solution of a compound of iodine with an albuminoid, each drop of which contains 1/32 grain of iodine.

IDO-NUCLEOID is a compound of iodine with nuclein; a reddish-brown powder, of faint iodine odor and taste, insoluble in the usual solvents and acids but soluble in alkaline liquids; iodine content 9½ per cent. It is used in place of the alkali iodides. Dose, 10 to 60 grains three times daily. Marketed also as 5-grain tablets.—Mfrs.: Dinet & Delfosse, Chicago, Ill.

IODOPETROX is a product analogous to iodine-vasogen, containing 6 per cent. of iodine in petrox ("oxidized petroleum"), and used chiefly by inunction (½ to 2 drams daily) to produce iodine effects on the system.

IODOPHEN was formerly a synonym of nosophen but has latterly been applied to a compound of bismuth and aluminium with diiodophenol, which forms an orange powder of faint phenolic odor, insoluble in alcohol, ether, and water, but soluble in fats and diluted acids. It is used as a drying wound antiseptic and astringent.

IODOPHENIN or *iodophenacetin*, $C_{20}H_{25}I_2N_2O_4$, results from precipitating a solution of phenacetin in hydrochloric acid by means of potassium iodide. It occurs as a brown powder containing about 50 per cent. of iodine, soluble in alcohol and insoluble in water, and employed as a wound antiseptic and antirheumatic. Dose, 8 to 15 grains.—Mfrs.: J. D. Riedel Co., Berlin and New York.

IODOPHENO-CHLORAL is a mixture of equal parts of iodine tincture, carbolic acid, and chloral hydrate, which is used as a paint in parasitic diseases.

IODOPYRIN (*iodoantipyrin*; *antipyrin iodide*), $C_{11}H_{11}IN_2O$, occurs as colorless crystals, soluble in alcohol, slightly soluble in water. It is used as an analgesic and alterative in tuberculosis, asthma, migraine, etc. Dose, 5 to 15 grains three or four times daily. It has been withdrawn from this market.

IODOR is described as a liquid, containing iodine organically combined and claimed to be free from the bad effects of alkali iodides. Dose, 15 to 45 minims; children, 5 to 20 minims.

IDOSE is a compound of nucleoproteid and iodine (10 per cent.), occurring as a reddish powder insoluble in the and acid liquids, but soluble in alkaline

fluids. It is intended as a substitute for the alkali iodides where these are not borne. Dose, 10 to 30 grains, before meals.

IODOSIN is an iodine-albumin compound containing 15 per cent. of iodine, and marketed also as *solution* (0.25 per cent. I) the dose of which is 1 to 2 tablespoonfuls three times daily. It is used instead of the alkali iodides.—Mfr.: W. Hunrath, Cassel, Germany.

IODOSOLVENT is a 25 per cent. solution of iodine in a glycerin base; a colorless liquid without action on starch, and is intended particularly for subcutaneous use.—Mfr.: Dr. J. L. Marbourg, Seattle, Wash.

IODOSOLVIN is a preparation similar to iodine-vasogen, "containing 15 per cent. of iodine in oily emulsion-like form." It is used chiefly externally, but also internally. Dose, 5 to 10 drops; by inunction, 1 dram.—Mfr. Einhorn-Apotheke, Altona, Germany.

IODOSYL is an iodine compound of the formula $C_6H_5I.(OI)COOH$, and occurring as a red, nearly odorless powder, insoluble in water and slightly soluble in alcohol, chloroform or ether. It is prescribed as a wound antiseptic, in place of iodoform. Marketed also as gauze, ovoids, ointment, pencils, and conoids.—Mfrs.: Nelson, Baker & Co., Detroit, Mich.

IODOTANNOL is defined as "a standardized solution of iodine and tannin."—Mfr.: "Naud," Paris, France.

IODOTERPIN, $C_{10}H_{16}I$, is a compound of equal weights of iodine and terpin hydrate; a thick, reddish-black liquid, of faint terebinthinous odor and aromatic taste, and soluble in ether, chloroform, and alcohol, and miscible with water to yield a brownish-red liquid; specific gravity about 1.19; iodine content about 50 per cent. It is readily absorbed by the skin, and is employed as a substitute for iodoform and iodine tincture externally (as ointment, or dusting-powder with kaolin).

IODOTHEOBROMINE (Prof. Rummo) consists of 40 per cent. of theobromine, 21.6 of sodium iodide, and 38.4 of sodium salicylate. It occurs as a white powder, soluble in hot water, and used chiefly in aortic insufficiency. Dose, 5 to 10 grains two to six times daily.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

IODOTHYMOFORM or *iodothyloform* is a yellow, almost odorless powder, intended as a wound antiseptic. One of its elements—thymoloform—is a formaldehyde combination. See caution under *formaldehyde*.—Mfr.: Dr. G. F. Henning, Berlin SW, Germany.

IODOTHYRINE (*thyroidine*) is a lactose trituration of the supposed active principle of the thyroid gland, 1 gram representing 1 gram of fresh thyroid; a whitish, sweet, stable powder, prescribed in struma, myxedema, certain chronic skin diseases and other affections in which

the thyroid gland is indicated. Dose, 15 to 30 grains daily in three doses; children, 5 to 15 grains per day. Marketed also as 5-grain tablets.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

IODOTHYROIDIN is a preparation analogous to thyroïdin.

IDOZEN is defined as a chemical combination of methyl salicylate and iodine; an amorphous powder of pleasant odor, used as an antiseptic like iodoform. Marketed also as 10 per cent. ointment.—Mfrs.: Wm. S. Merrell Co., Cincinnati, O.

IDOZOLE is identical with the better known *sozoiodole*, which see.

IODPEPTIDE is the name applied to an organic preparation of iodine prepared by peptonizing 10 grams of egg-albumin and dissolving the resulting product in 100 c.c. (mils) of water. Iodine is now introduced, and thus is obtained a faintly yellow liquid with a green fluorescence. This liquid is filled into ampuls of 5 c.c. (mils) capacity, and sterilized. The amount of iodine that enters into combination varies, according to the strength of the compound to be prepared. The author has prepared three strengths of liquid: No. 1 contains 1.75 per cent. of iodine; No. 2, 2.45 per cent., and No. 3, 3.48 per cent. Iodpeptide is put forward as an alterative. It is used hypodermically.—Mfr.: Prof. A. Cechini, Rome, Italy.

IODTHONOL is a petrolatum ointment containing iothin. It is intended for veterinary practice.

IODTROPON TABLETS are 15-grain tablets containing each $\frac{3}{4}$ grain of iodine combined with tropon. They are used as an alterative in scrofula and similar cachexias. Mfrs.: Tropon Works, Mülheim (Germany) and New York.

IODUEROL is an oily liquid said to contain 5 per cent. of iron iodide.—Mfr.: K. Tschanter, Herichsdorf, Germany.

IODYCHTHOL is defined as "a solution of ichthyol, iodine, hydrastis, thymol and boroglyceride," and is used as a topic antiseptic, antiphlogistic and cicatrizing, mainly in uterine and vaginal affections.—Mfr.: Wm. S. Merrell Chem. Co., Cincinnati, O.

IODYLIN is a light-yellow powder of faint iodine odor, chemically definable as *bismuth iodosalicylate* and used as a drying antiseptic in surgery.—Mfrs.: Chem. Fabrik von Ostermayer, Erfurt, Germany.

IODYLOFORM is a compound of iodine with gelatin, occurring as an odorless, yellowish-brown powder containing 10 per cent. of combined iodine, and insoluble in water, alcohol or ether. It is prescribed principally as a wound-antiseptic similar to iodoform, but also internally as a substitute for potassium iodide in doses of 3 to 15 grains

three times daily, as tablets.—Mfrs.: C. Kohlmeyer & Co., Berlin W.

IOMACOLADE is hemocolade (hemoglobin-chocolate) with 2½ per cent. of iodides and intended for prolonged constitutional treatment with iodine.—Mfr.: Fritz Sauer, Berlin W, Germany.

IOSAL Elixir is an antirheumatic, of which "each fluid ounce represents ammoniated tincture guaiac 96 minims, wine colchicum seed 84 minims, solution potassium arsenite 24 minims, potassium iodide 18 grains, sodium salicylate 20 grains, oil gaultheria and aromatics q. s. Dose, 1 fluid dram.—Mfr.: Norwich Pharmacal Co., Norwich, N. Y.

IOSANGUIN is a blood preparation containing also iodine.—Mfr.: P. Weinreich, Davos-Platz, Germany.

IOSCORPTOL, formerly known as *sapogen*, is an iodine preparation for external use as a resolvent and discutient. It contains 10 per cent. of iodine and occurs as a thick liquid of the consistency of honey. It does not stain the skin considerably.—Mfr.: J. Schürholz, Cologne, Germany.

IOThION is defined as *diiodohydroxypropane*, $C_3H_4I_2OH$. It occurs as a thick, yellowish liquid of peculiar odor and neutral reaction, specific gravity 2.4 to 2.5 at 15° C., and containing 77 to 80 per cent. of iodine. It is easily soluble in alcohol, ether, chloroform and fixed oils and in 20 parts of glycerin; almost insoluble in water. It is used as a topical substitute for iodine and the iodides, and is usually applied in 5 to 25 per cent. solutions in olive oil, sometimes in a mixture with equal parts of alcohol and glycerin or in ointments. Dose per inunction, 15 to 60 minims.—Mfr.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.—[The iodine addition product of sesame oil marketed some time ago under the name "iothion" has been withdrawn.—Ed.]

IOThIONOL is a veterinary preparation of iothion containing 25 per cent. of the latter. It occurs as a clear, yellowish-brown liquid. It is used by inunction.

IPODERMOIDI is the generic name for a series of sterilized medicamentous solutions supplied in hermetically sealed tubes and intended for subcutaneous injection.—Mfrs.: Vidali & Vardabasso, Trieste, Austria.

IRIDINOL is a proprietary remedy for the treatment of chronic posterior urethritis by injection.—Mfrs.: P. H. Potter & Sons, New York.

IRON-ALBUMOSE.—See *ferro-somatose*.

IRON-AMMONIUM ARSENO-CITRATE is a double-salt of ferrous arsenate and ammonium citrate, containing 1.4 per cent. of arsenous acid and about 15 per cent. of iron. It forms green scales freely soluble in water, and is used chiefly in pernicious anemia and malaria of children.—

Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

IRON ANTISCLEROSIN is antisclerosin with 10 per cent. of reduced iron. It is used chiefly in arteriosclerosis associated with anemia. Dose, 2 to 4 tablets.—Mfr.: Wm. Natterer, Munich, Bavaria (Germany).

IRON ARSENITE SOLUBLE (*ferric arsenite with ammonium citrate*) occurs in green scales that are easily soluble in water. It contains 1.06 per cent. of arsenic and about 15 per cent. of iron. It is used as a hematinic and alternative, particularly in anemia complicated with malaria, pellagra, etc. Dose, $\frac{1}{2}$ to 1 grain three times daily; subcutaneously, $\frac{1}{2}$ grain every two or three days. Marketed also as ampuls containing 1 grain of the salt in 16 minims of distilled water.—Mfrs.: Sharp & Dohme, Baltimore, Md.

IRON CACODYLATE (ferric) or *iron dimethylarsenate*, $[(CH_3)_2AsO_2]_2Fe$, occurs as a grayish-green powder, moderately soluble in water, less freely so in alcohol, and containing 32 per cent. of arsenous acid and 45 per cent. of ferric oxide. It is used subcutaneously or internally in chlorosis, lymphadenitis, etc., where both arsenic and iron are indicated. Dose, $\frac{1}{4}$ grain to 4 grains per day.—(Nonproprietary.)

IRON CASEINATE or **NUCLEO-ALBUMINATE** results from the action of calcium caseinate upon a freshly made solution of ferrous lactate and forms an odorless, tasteless powder, containing $2\frac{1}{2}$ per cent. of ferric oxide, insoluble in water, but soluble in weak solution of caustic soda or ammonia. It was recommended by Dr. Dawydow as a readily absorbed iron compound. Dose, 3 to 10 grains.

IRON DIMETHYLARSENATE.—See *iron cacodylate*.

IRON GLYCERINO-ARSENATE, also known as *marisitriol*, is prescribed by French physicians as an assimilable arsenical in doses of $\frac{1}{6}$ grain three times daily.

IRON GLYCERINOPHOSPHATE, $FePO_4 \cdot C_3H_5(OH)_2 + 2H_2O$, occurs as greenish-yellow, odorless scales or powder, soluble in water or diluted alcohol and employed in chlorosis, neurasthenia, etc., in doses of 3 to 10 grains thrice daily as pills or in solution. Its solutions do not keep long, and consequently they should be prepared in small quantities at a time and always with freshly sterilized water.—(Nonproprietary.)

IRON HYDROCYANATE is a preparation exploited as a remedy for epilepsy and other neuroses. No chemical description is published by the manufacturers; but from an analysis made in the laboratory of the American Medical Association it is concluded that "hydrocyanate of iron is essentially a mixture of approximately equal parts of prussian blue and talc, containing traces of organic matter having the general properties of alkaloids." Dose, $\frac{1}{2}$ to

2 grains two or three times daily, in pills or tablets. Marketed also as tablets.—Mfrs.: Tilden Co., New Lebanon, N. Y.

IRON NUCLEINATE is marketed under several trade names, the best known of which is *ferrinol*; see this.

IRON PARANUCLEINATE.—See *triferrin*.

IRON PHOSPHOSARCOLACTATE is described under *carniferrin*.

IRON-PROTYLIN. See under *protlylin*.

IRON-ROBORAT is a fine, yellowish powder, which is said to consist of water 7.52 per cent., ether extractive 11.3 per cent., protein 73.38 per cent., iron 0.5 per cent. and lecithin about 4 per cent. It is intended for use in all cases where iron is indicated. Dose, 2 to 4 drams per day, in milk, soup, etc.—Mfr.: H. Niemüller, Gütersloh, Germany.

IRON SOMATOSE.—See *ferro-somatose*.

IRON SUCCINATE (*ferric succinate*) occurs as a reddish-brown powder, nearly insoluble in water but soluble in acids. It is used chiefly in gallstone disease. Dose 10 to 60 grains after meals, 10 drops of chloroform being given at the same time four to six times daily.—(Non-proprietary.)

IRON SULPHOICHTHYOLATE.—See *ferrichtol*.

IRON-TROPON consists of 91.5 per cent. of tropon, 6 per cent. of cocoa, and 2.5 per cent. of iron, and forms a soluble, palatable powder, which is given as a ferruginous food in doses of a teaspoonful three times daily, in milk, water, etc.—Mfrs.: Tropon Works, Mühlheim, Germany, and New York.

IRON-VITELLIN.—See *oviferrin*.

IROSYL is the name applied to pills of iron and sodium pyrophosphate, potassium bromide and quinine hydrobromide. The pills are employed in anemia, chlorosis, etc.—Mfrs.: Fritz-Petzoldt & Süß, Vienna, Austria.

IRRIGAL Tablets, described by the manufacturers as "wood vinegar in solid form," consist, according to Dr. F. Zernik, essentially of a perfumed mixture of partially dehydrated sodium acetate and small quantities of wood tar and creosote converted to the dry state by magnesia. They are offered for irrigation in inflammation of the mucosæ.—Mfr.: H. Barkowski, Berlin O, Germany.

ISAROL, formerly known as *ichthodin*, is defined as *ammonium sulphoichthyolate* Pharm. Helv., and would hence appear to be the same as *ichthyol*.—Mfrs.: Gesellschaft für Chem. Industrie, Basle, Switzerland; agts.: A. Klipstein, New York.

ISCHEMIN is another trade name for the 1:1000 solution of the active principle of the suprarenal capsule.—Mfrs.: Armour & Co., Chicago, Ill.

ISICYL Bougies are described as containing "5 per cent. of phenyform and 10 per cent. of Iodosalicylic ether."—Mfrs.: Fritz-Petzoldt & Süß, Vienna, Austria.

ISIS OINTMENT is said to consist of flowers of sulphur, camphor and fat, and is exploited as a dermatologic remedy.—Mfr.: H. Forsberg, Stockholm, Sweden.

ISN is a palatable liquid chalybeate containing 0.2 per cent. of saccharated ferrous oxide.—Mfr.: J. G. W. Opfermann, Aix-la-Chapelle, Germany.

ISO-AMYL-TRIMETHYLAMMONIUM CHLORIDE is *amylarin*.

ISO-BUTYL-ORTHOCRESOL IODIDE.—See *europhen*.

ISOFORM is the name applied to *para-iodo-anisol*, $C_6H_4.OCH_3.IO_2$, obtained by oxidizing iodo-anisol. The drug forms silvery scales, slightly soluble in water, and insoluble in alcohol or ether. It is intended as a wound antiseptic like iodoform, and is marketed only as dusting-powder (with an equal weight of calcium phosphate), paste (1:1 glycerin), gauze (1 to 10 per cent.), and capsules (for internal use) each containing $7\frac{1}{2}$ grains of the drug, and employed as a gastrointestinal antiseptic. Isoform is incompatible with reducing agents such as tannic acid, etc.—Mfrs.: Meister, Lucius & Brünig, Hoechst, Germany; agts.: V. Koechl & Co., New York.

ISO-NAPHTOL is *beta-naphthol*.

ISO-PHYSOSTIGMINE is an alkaloid obtained from the ether-insoluble portion of the alcoholic extract of calabar bean used in the preparation of physostigmine (eserine). It has the same chemical formula as the latter base, but is insoluble in ether; and, according to Prof. Ogiu, similar also physiologically, but more intense, rapid, and lasting in action than eserine, both in local as well as internal use—0.75 gram of iso-physostigmine correspond to 1 gram of physostigmine. Dose of the sulphate or salicylate, 1/150 to 1/60 grain; applied as a myotic in 0.1 per cent. solution, which should be dispensed in amber bottles. Antidote, atropine.

ISOPRAL is chemically *trichlor-isopropyl alcohol*, $CCl_3-CH.(OH).CH_3$, a crystalline, volatile substance of camphoraceous odor and burning taste, and soluble in alcohol, ether or water (about 30 parts). It is prescribed as a hypnotic, in doses of 10 to 30 grains, given in solution. It should not be dispensed in paper, on account of its volatility, and it should be kept in a cool place.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

ISO-PYRAMIDON CITRATE.—See *citrovaniille*.

ISOTACHIOIOL is a new silver salt claimed to be more stable in the dry state than tachiol (silver fluoride), while its antiseptic and bactericidal powers are the same.

ISSON is described as a palatable, permanent liquid preparation of iron, containing 0.2 per cent. of ferrous saccharate. Dose, $\frac{1}{2}$ to 1 teaspoonful; children take 10 to 30 drops.—Mfr.: Alfred Riley, Aix-la-Chapelle, Germany.

ISUTAN is described under *bismutan*.

ITROL was the name formerly applied to a certain brand of *silver citrate* then also designated as "antiseptic Crédé." but it has latterly been abandoned in favor of the chemical appellation, under which it will be described in these pages.

IXODIN is an extract of certain wood ticks prepared with physiological solution of sodium chloride. It is said to prevent the coagulation of the blood.

IZAL is a natural mixture of resin soaps and tar oils rich in cresols, obtained as a by-product in the distillation of coal. It is claimed to be a strong, relatively non-poisonous disinfectant. Dose (in intestinal diseases) 5 to 10 drops, in capsules.

J

JAMAROSIN is a fluid extract of an East-Indian myrtacea, used in France in diabetes. Dose, 6 to 10 drops three times daily.—Mfrs.: Dr. Bocquillon & Limousin, Paris, France; agts.: E. Fougere & Co., New York.

JATREVIN is stated to be a condensation product of menthol and isobutyl-phenol; a clear, colorless liquid, of peppermint-like odor, and readily soluble in alcohol but slightly soluble in water or ether. It is used by spray-inhalation ($2\frac{1}{2}$ to 5 per cent. solutions) in phthisis and respiratory catarrhs.—Mfr.: Ernst Jäckel, Berlin, Germany.

JECOLEIN is an ointment base said to be prepared from purified cod liver oil and beef suet. It is marketed as *anhydrous jecolein*, *aqueous jecolein* containing 10 per cent. of water, *gelatinated jecolein* containing 10 per cent. of sterilized gelatin, and as *glycerinated jecolein* containing 10 per cent. of glycerin.—Mfrs.: Fritz-Petzoldt & Süß, Vienna, Austria.

JECORIN TABLETS each contain 45 grains of cod liver oil, with powdered extract of malt, cocoa, sugar and glycerin, and serve as a palatable form of giving cod liver oil. Abroad the name jecorin is applied by Berkenheier, of Diedendorf, also to a substitute for cod liver oil, 20 grams of which are stated to contain 0.1 gram each of calcium hydrochlorophosphate and calcium lactophosphate, 0.05 each of bromine and iodine, 0.075 of iron iodide, and "extract artemisia compound."—Marketed by Schering & Glatz, New York.

JECORINA is said to be a mixture of calcium hydrochlorophosphate and neutral sodium phosphate of each

0.1 gram, lactic acid 0.05 gram, phosphoric acid 0.6 gram, iodine 0.1 gram, ferrous iodide 0.075 gram, extract of artemisia 1 gram, and fruit juice.

JECORISSAL is a succedaneum for cod liver oil in powder form, made by Dr. Mauch, Göppingen, Germany.

JECOROL is a brand name for the extractives of cod liver oil (known also by the names morrhuol, gaduol, etc.) It is applied in Switzerland (Fr. Hausmann, of St. Gallen) to an emulsion of cod liver oil containing chocolate and flavoring principles, and marketed also in various combinations—with gualacol (2 per cent.), with iodine (10 per cent. iodipin), and with lecithin (0.6 per cent.).—Mfrs.: F. Stearns & Co., Detroit, Mich.

JECOVOL is an egg emulsion of cod liver oil, containing 50 per cent. by volume of the latter together with hypophosphites.—Mfrs.: Jas. Worley, Sons & Co., Manchester.

JEQUIRITOL is a sterilized, standardized preparation of jequirity seed introduced by Prof. Roemer for use in certain chronic eye diseases in which jequirity infusion was formerly employed. It contains 50 per cent. of glycerin, and is marketed in four strengths: Nos. 1, 2, 3, 4.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

JEQUIRITOL SERUM is an antitoxin prepared in accordance with Behring's principles, and said to be capable of promptly arresting the action of jequiritol, for which purpose it is solely used.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

JODALBACID, JODIPIN, and other "jod" derivatives, see under *I*.

JODKRESOL.—See *traumatol*.

JOHIMBINE.—See *yohimbine*.

JUBOL is a laxative preparation of French origin. It is produced from agar-agar.

JUGLANDIN is a resinoid from the root bark of *juglans cinerea* (butternut), occurring as a grayish-white powder insoluble in water and only slightly soluble in alcohol. It is used as a mild laxative and antiperiodic, in doses of 2 to 5 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

JUGLANDINE (Ferrouil) is not, as its name might indicate, a proximate principle of *juglans* (butternut), but a liquid mixture containing reputedly *juglans regia*, quassia, cinchona, orange peel, iodine, glycerophosphoric acid and iron. It is used in anemia, chlorosis and the like.

K

KADUGEN is a new iron preparation intended for external use. It is said to contain 2 per cent. of metallic

iron.—Mfrs.: Berliner Pharmaceutische Fabrik, Berlin, Germany.

KAIRIN A and KAIRIN M were two quinoline derivatives introduced some years ago as antipyretics, but no longer employed therapeutically owing to the untoward by-effects they frequently produced.

KALAGUA EXTRACT is said to be prepared from a South American plant. It has a garlicky odor and taste, and has been introduced as a remedy in phthisis. It is marketed only as pills; dose, 1 to 4 three times daily.—Mfrs.: McKesson & Robbins, New York.

KALARINE is a coal tar antipyretic and analgesic, claimed to be "free from depressing effect"—probably a mixture consisting essentially of acetanilid with some caffeine (intended to counteract the depressing effect of the former). Dose, 5 to 10 grains.

KALENDOL is an astringent and antiseptic dusting-powder said to represent calendula, ichthyol, iodine, acetanilid and boric acid. It is soluble in water or glycerin, or in a mixture of alcohol and water, but insoluble in pure alcohol, ether, or oils.—Mfrs.: Norwich Pharmacal Co., Norwich, N. Y.

KALIOL is a dusting-powder containing 10 per cent. of xyol as its medicinally active constituent.

KALODAL. See *calodal*.

KALYFORM is a tooth paste containing potassium chlorate and lysoform.

KAMOKOSIN is a tapeworm remedy consisting essentially of kamala and koussein (kosin).—Mfr.: Dr. H. Remmler, Berlin N, Germany.

KANKROIDIN.—See *cancroidin*.

KAOLIN (*bolus alba*), aside from its use as a basis of the official cataplasm of kaolin and as an absorbent dusting-powder, has latterly been used also internally, in Asiatic cholera and other acute infectious diarrheas. For adults 2 to 4 ounces, and for children $\frac{1}{2}$ to 2 ounces, are stirred into water and administered in the course of a day in small portions at a time every twenty or thirty minutes. The treatment is preceded by a fast of twenty-four hours. Supplied by wholesale druggists in general.

KAPITOL is said by Dr. J. Kochs to consist of 63 per cent. of anhydrous wool fat, 14.5 per cent. of water and 22.5 per cent. of menthol; whereas, according to the manufacturers, it is composed of 10 parts of anhydrous wool fat, 4 parts of menthol, 0.5 part of salicylic acid and 0.02 part of iodine. It is used by inunction as a local anodyne, particularly in rheumatic affections and neuritis.—Mfrs.: Schurz & Co., Oberlössnitz, Germany.

KARSAN is described as a meat juice obtained from fresh beef, without the addition of egg albumin.—Mfr.: Wilh. Pick, Munich, Germany.

KASTANOL, also known as *Pflügge's extract of horse chestnut*, is described as containing the active principle of horse chestnut with 8 per cent. of camphor. It is used by inunction or as a paint in rheumatism, neuralgia, and other painful affections.—Mfr.: Carl Engelhard, Frankfurt-on-M., Germany.

KASUCOLUM is one of the many trade names latterly applied to *potassium sulpho-guaiacolate* (guaiacol sulphonate), best known in this country by the name *thiocol*.—Mfrs.: Fritz-Petzoldt & Süss, Vienna, Austria.

KATHARIN is a name applied to *carbon tetrachloride*, which is used, as is known, as a local anesthetic.

KATHAROL is said to be an aromatized solution of hydrogen peroxide intended as a mouth-wash and disinfectant.—Mfr.: Med. Waarenhaus, Berlin N, Germany.

KATHERPURIN is a lubricant for catheters, said to have the following composition: mercury oxycyanide $3\frac{1}{2}$ grains; glycerin $5\frac{1}{2}$ ounces; tragacanth 46 grains; sterilized distilled water 3 drams.

KAVAKAVIN TABLETS, employed in diseases of the urinary tract, contain extract of kava-kava and hexamethylenetetramine (hexamethylenamine). See caution under *formaldehyde*.—Mfr.: Max Jasper, Bernau, Germany.

KAWA-SANDAL.—See *gonosan*.

KEFYROGEN (*kefirogen*) is described as a pure kefir ferment of high fermenting power, and is used for the home preparation of kefir (koumyss); one-day kefir, aside from its nutritive properties, has a laxative action, two-day kefir is indifferent, and three-day kefir has a constipating by-effect.—Mfrs.: Goedecke & Co., Berlin; agts.: Schering & Glatz, New York.

KEFYROGEN-FEOLATHAN Tablets are intended for the convenient preparation of iron kefir by simple solution in milk.—Mfrs.: Goedicke & Co., Berlin, Germany; agts.: Schering & Glatz, New York.

KEIMOL is a recently introduced liquid disinfectant of the listerine type, the active constituents of which are salol, thymol, oil of wintergreen and menthol. It is used externally from full strength down to a 1:4 dilution. Dose, 1 fluid dram diluted.

KELENE is a brand of the official *ethyl chloride*, marketed in automatic tubes and used as a local as well as a general anesthetic. It is also furnished in various combinations (cocaine, formaldehyde, etc.) designated as "autosprays".—Mfrs.: Fries Bros., New York; agts.: Merck & Co., New York.

KELENE-METHYL is a mixture of compressed ethyl chloride and methyl chloride, used as a local anesthetic.

KENOTOXINE is said to be a fractionation product of albumin, and is intended to serve as an "antibody" against

certain toxic decomposition products of the albumin of the body.

KEPHALDOLUM is described chemically as a reaction product resulting under certain circumstances from the action of citric acid and salicylic acid upon phenetidins, and subsequent neutralization of any free acid present with alkaloidal quinine or with sodium carbonate. It occurs as a yellowish-white powder, slightly bitter, soluble in alcohol and almost insoluble in water. It is prescribed as an antipyretic, antineuralgic and antihydrotic. Dose, 10 to 20 grains.—Mfrs.: Fritz-Petzoldt & Süss, Vienna, Austria.

KEPHALOPIN is a cold-prepared oily extract of fresh brain substance that is used per os or hypodermically in hysteria, neurasthenia and other nervous diseases. Dose, 2 to 5 c.c.—Mfrs.: Institute for the Investigation of Infectious Diseases, Genoa, Italy.

KERAMIN SOAP (Unna) is a soda-potash soap containing balsam of peru and flavored with oils of clove and cinnamon. It is employed chiefly in eczema and other skin diseases.—Mfr.: Karl Toepfer, Leipsic, Germany.

KERMELOL is the name applied to keratinized, silver-coated capsules, 25 of which contain 7.5 grams of extract of male fern and 0.15 gram of santonin, and which are prescribed as an anthelmintic.—Mfr.: Apotheker Ludwig, Russ, Germany.

KETYN (*solution K*) is intended for use in connection with the employment of nastin, when the latter produces an undue amount of reaction in leprosy.—Mfrs.: Kalle & Co., Biebrich, Germany; agts.: Lehn & Fink, New York.

KHARSINE is the trade name applied to *sodium para-amido-meta-tolyl-arsinate*, or *sodium methylaminophenyl-arsenate*, a compound related to soamin (sodium para-amido-phenyl-arsinate). It is intended to replace atoxyl. It contains 23.7 per cent. of metallic arsenic and is soluble in about $2\frac{1}{2}$ parts of water. It is used hypodermically in sleeping sickness, malaria, syphilis, etc. Dose, 1 to 3 grains. See caution under *atoxyl*.—Mfrs.: Burroughs, Wellcome & Co., London and New York.

KIL is a grayish-white mineral mass consisting chiefly of silicic acid, alumina, ferric oxide, chalk and magnesium carbonate, and used for aseptic dressings in skin diseases and as a plaster and soap base.

KINEURIN is a trade name for *quinine glycerinophosphate*.

KLEBS ALKALINE DISINFECTANT consists of sodium hydroxide, sodium chloride and water.

KLONEIN is a "milk-albumin solution which is used in colic of horses and cattle as a peristaltic, as well as a diagnostic in intestinal and peritoneal inflammation." Dose, $1\frac{1}{2}$ to 2 fluid drams.—Mfrs.: Bengen & Co., Hamburg, Germany.

KOLADIASTATIN is the name applied to tablets each containing extract of kola equivalent to $\frac{1}{6}$ grain of caffeine and diastatin [diastaste?—Ed.]. The article is offered as a general tonic.—Mfrs.: Hauser & Sobotka, Stadlau, Germany.

KOLA DULTZ is the name of tablets containing kola and calcium phosphate and flavored with vanillin.

KOLAFER is a kola-iron-cinchona compound.

KOLAFERRIN is a liquid nerve tonic each teaspoonful of which is said to contain 4 grains of triferrin, 6 grains of kola extract, 6 minims of tincture of cinchona, 1/40 grain of strychnine and syrup of orange.—Mfrs.: Dr. Fr. Koltschaar & Cie, Wiener-Neustadt, Austria.

KOLANIN is a glucoside discovered by Knebel and considered by him as the active principle of kola. It is marketed as 3-grain tablets; dose, 1 to 3.—Mfrs.: Krewel & Co., Cologne, Germany; agts.: Lehn & Fink, New York.

KORPULIN, **KREALBIN**, and some other remedies whose names are often spelled with a "K," see under *C*.

KORTOL is "a compound liniment of eucalyptus" exploited as an antirheumatic embrocation.—Mfr.: Fr. Hausmann, St. Galen, Switzerland.

KORYL (not coryl), also designated as "heilsäure" (curative acid), is a white powder consisting of "acid orthophenolsulphonborosalicylic" with 1 per cent. of iodolementhol. It is employed by nasal insufflation in diphtheria and nose and throat diseases.—Mfr.: W. Lakemeier, Cologne, Germany.

KORYSAN is a new name applied to Homeyer's *carbonated hematogen*, a hematinic.—Mfrs.: Homeyer & Cie, Schöneberg, Germany.

KOSSAM is the trade name applied to tablets containing a preparation of the oily seeds of *brucea sumatrana* (a *simarubea*) and offered as a remedy in amebic dysentery. "Kossam" is also the Chinese name of the seeds named which are used as a household remedy in dysentery. The active principle of kossam is said to be the glucoside kossamin, isolated by Bertrand at the Institute Pasteur, Paris. Mfr.: Collin, Paris, France; agts.: E. Fougere & Co., New York.

KRELUTION is a liquid disinfectant consisting of a cresol soap solution containing 66 per cent. of cresol and prepared with the aid of dericin soap. It yields green solutions with water.—Mfr.: Dr. H. Noerdlinger, Floersheim, Germany.

KREMULSION is defined as an emulsion of cresol and resin soap, and is used in veterinary practice as a detergent, antiscabic, etc.—Mfr.: Dr. Noerdlinger, Floersheim, Germany.

KREOSPINOL is a combination of spinol with creosote, occurring as a greenish-brown powder that can readily be

made into pills. It is intended as a hematinic and anti-catarrhal. Dose, 1 to 3 grains.—Mfr.: J. E. Stroschein, Berlin, Germany; agts.: Fischer Chem. Importing Co., New York.

KRESAMINE (*ethylenediamine-trikresol*; *kresolamine*; *trikresolamine*; *ethylenediaminecresol*) is a clear, alkaline, watery solution containing 25 per cent. each of ethylenediamine and trikresol, of carbolic odor, and soluble in all proportions in glycerin, up to about 20 per cent. in water, but insoluble in petrolatum. It is used as an antiseptic and bactericide in tuberculosis by inhalation (25 to 36 per cent. solutions) in skin diseases, (4 to 20 per cent. ointments), wounds ($\frac{1}{2}$ to $1\frac{1}{2}$ per cent. lotions), etc. Exposure darkens the article.—Mfr.: E. Schering, Berlin; agts.: Schering & Glatz, New York.

KRESAPOL or *kresosaponate* is a disinfectant corresponding to liquor cresoli compositus U. S. P.

KRESAPROL. See *kresin*.

KRESEPTOL is a disinfectant and antiseptic solution "containing 50 per cent. of pure, redistilled mixed cresols—ortho- meta- and para- obtained from coal tar." It is evidently similar to the pharmacopœial solution cresol compound.—Mfr.: Eli Lilly & Co., Indianapolis, Ind.

KRESIN (*kresapol*) is a solution of cresol in a solution of sodium cresoxylacetate, containing 25 per cent. of cresol. It occurs as a brown liquid which mixes clearly with water and with alcohol. It is intended as a disinfectant and deodorant.—Mfr.: E. Schering, Berlin, Germany; agts.: Schering & Glatz, New York.

KRESO is a coal-tar product consisting largely of cresols and the higher phenols, and hence analogous to creolin. It is used in the same strengths as carbolic acid as a disinfectant, deodorant and parasiticide. It is marketed also as a "dip" for parasitic diseases of animals.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

KRESOCHIN consists of neutral quinoline tricesylsulphonate and a loose compound of quinoline with trikresol; it contains 33 per cent. of quinoline and 17 per cent. of trikresol, and occurs as a fluid soluble in 20 parts of water, and used as a surgical disinfectant in 2 to 5 per cent. solutions.—Mfrs.: Franz Fritzsche & Co., Hamburg, Germany; agts.: Parmele Pharm. Co., New York.

KRESOLAMINE.—See *kresamine*.

KRESOPHEN is a new surgical antiseptic of undivulged composition.

KRESOSAPONATE.—See *kresapol*.

KRESOSOLVIN was formerly known as *creolin Ahrens*, in contradistinction to creolin Pearson, the article generally known on this market simply as creolin. See *creolin*.—Mfrs.: F. Ahrens & Co., Altona-Ottensen, Germany.

KRESOTINA is defined as a "derivative of repeatedly purified creosote, which is then combined with benzoic acid in presence of CO_2 . It has a pleasant, aromatic odor, and is intended as a substitute for creosote.

KRESULFOL is a cresolsulphonic acid obtained by mixing 2 volumes of crude cresol with 1 volume of crude sulphuric acid. It is employed as a general disinfectant, in 3 per cent. aqueous solution.—Mfrs.: J. D. Riedel Co., Berlin and New York.

KRETOL is defined as "a chemical combination produced by the dry distillation of a peculiar kind of coal; an alkaline carbolate; a pure coal-tar creosote from which all naphtha products have been removed." It occurs as a dark-brown liquid, having a strong tarry odor and yielding a milky mixture with water. In physical as well as in therapeutical properties it resembles creolin. It is proposed as a disinfectant and deodorant in $\frac{1}{2}$ to 2 per cent. solutions.—Mfrs.: Kretol Co., Washington, D. C.

KRISTALLIN.—See *crystalline*.

KRONHEMATOGEN is a brand of hematogen, marketed also in combination with ferrous iodide. It is prescribed as a hematinic, and the combination with iron iodide as an alterative and anticachectic.

KRUSE SERUM is an antidysenteric serum prepared by the Vienna Governmental Serum Institute.

KRYOFINE, *methoxy-acet-para-phenetidin*, $\text{CH}_3\text{OCH}_2\text{-CONH.C}_6\text{H}_4\text{.OC}_2\text{H}_5$, is a condensation product of para-phenetidin and methylglycolic acid; fine, colorless, odorless, tasteless crystals, freely soluble in alcohol, ether or fixed oils, and sparingly so in cold water (600). It is prescribed as an anodyne and antipyretic. Dose, 4 to 7½ grains. Marketed also as tablets of these sizes.—Mfrs.: Baseler Chem. Fabrik, Basle, Switzerland; agts.: C. Bischoff & Co., New York.

KRYOGENIN.—See *cryogenine*.

KRYSYL is a disinfectant of the type of creolin, forming a milky emulsion with water. It is used mostly in 1 to 2 per cent. solutions. It is marketed in two grades: one for use as a general disinfectant and deodorant; the other, *surgical krysyl*, for employment in surgery.—Mfrs.: Balss Bros. & Stevenson, London, Eng.

KUGLOIDS is the terse name applied to capsules, each of which contains quinine glycerophosphate $\frac{1}{2}$ grain, creosote benzoate 1 grain, eucalyptol benzoate $\frac{1}{2}$ grain, and excipient q. s. The name is derived from that of the author of the formula, Dr. Kügler, of Paris.—Mfrs.: Anglo-American Pharmacal Co.; agts.: E. Fougere & Co., New York.

KURIATOR is a name for honey, diluted with water. It contains traces of camphor. It is exploited for the treatment of coughs, etc.

KURIN is a laxative marketed in tablet form, which is said to consist of a combination of compound licorice powder and phenolphthalein.—Mfrs.: Chem.-pharm. Laboratorium "Arnau," Arnau, Austria.

K—Y is a lubricating jelly for the use of surgeons, obstetricians and gynecologists. It is marketed only in collapsible tubes.—Mfrs.: Van Horn & Sawtell, New York.

L

LABORDINE is advertised to physicians as having the following composition: "Apium graveolens (true active principle) 35%; gaultheria fragrantissima 25½%; acetamide-phenyle 15½%; quinia 1½%; benzoylsulphyonic imide 23¼." The average of the reports of analysis made at the chemical laboratory of the American Medical Association shows that "labordine contains acetanilid 37.9 per cent.; free salicylic acid 6.9; quinine present; saccharin not found; corn starch present; milk sugar 34.7." It is exploited as an antipyretic and analgesic. Dose, 5 to 15 grains. Mfrs.: Labordine Pharmacal Co., St. Louis, Mo.

LACHROTHYM is the trade name applied to tablets, the essential constituents of which are extract of thyme, ammonium chloride and extract of licorice, together with aromatics. They are offered as a remedy for cough and other affections of the respiratory tract.—Mfrs.: L. Pupke Nachf., Neisse, Germany.

LACTAGOL is a dry extract of cottonseed; a fine, yellowish-white powder, insoluble in water but forming a sort of emulsion therewith. It was introduced by Dr. B. Beckman of Hamburg as a galactagogue. Dose, a heaping teaspoonful three or four times daily, in milk.—Mfrs.: W. Pearson & Co., Hamburg, Germany; agts.: Lehn & Fink, New York.

LACTANIN is a *bismuth dilacto-monotannate*, occurring as a yellowish, odorless, tasteless, insoluble powder, and prescribed as an intestinal astringent. Dose, 5 to 15 grains several times daily.—Mfrs.: Société Chim. des Usines du Rhône, Lyons, France; agts.: Fries Bros., New York.

LACTO is a milk food consisting of casein and the whey of milk deprived of fat. It is a doughy, light-brown mass possessing the odor of toasted bread and the taste of beef tea. It is readily soluble in water.

LACTOBACILLINE is a ferment marketed in liquid and powder forms. It is credited with antizymotic power. It seems to contain a pure culture of a certain species of lactic acid bacteria, which, according to Prof. Metschnikoff, remain living in the intestinal secretion, oppose putrefaction, improve digestion, stimulate the gastric and intestinal functions, and by their diuretic action prevent renal calculi. Milk curdled with lactobacilline is said to

be refreshing and to have a pleasant taste and may be taken pure or mixed with sugar, and, it is stated, is readily drunk by persons having an aversion for milk. This curdled milk is generally given in doses of $\frac{1}{4}$ pint, with breakfast and at bedtime.—Mfrs.: Le Ferment, Paris, France; agts.: Franco-American Ferment Co., New York.

LACTOCRESOL is a coal tar disinfectant analogous to creolin—a dark, thick liquid, forming a milky emulsion with water. For surgical purposes it is used in $\frac{1}{2}$ to 2 per cent. solutions.

LACTOFERROL is a Russian sterilized milk containing 0.2 per cent. of metallic iron.

LACTOFORM is a combination of milk and formaldehyde, the milk being condensed in vacuo and converted into a formaldehyde-albumin emulsion. It is used as an application in rheumatism. See caution under *formaldehyde*.—Mfrs.: Oesterreichische Chem. Werke, Vienna, Austria.

LACTOGEN is the name applied to pills containing extracts of saw palmetto, goat's rue, coca, kola, and peptonized iron, and used in anemia and neurasthenia. Dose, 2 pills before meals and at bedtime.

LACTOIODINE and **LACTOJOD**. See *proiodine*.

LACTOL (*lactonaphthol*) is the lactic acid ester of betanaphthol, of the formula $\text{CH}_3\text{CH.OH.COO.C}_{10}\text{H}_7$. It forms colorless crystals that are soluble in alcohol but insoluble in water, and is used as an intestinal antiseptic particularly in children in daily quantities of about 15 grains.

LACTOPEPTINE, offered as a digestive powder, is said to consist essentially of a mixture of 240 parts of milk sugar, 48 parts of pepsin, 36 parts of pancreatin, 3 parts of diastase, 4 parts of 25 per cent. hydrochloric acid and 4 parts of lactic acid.—Mfrs.: New York Pharm. Ass'n, Yonkers.

LACTOPHENIN (*lactyl-para-phenetidin*), $\text{C}_{11}\text{H}_{13}\text{NO}_2$, differs chemically from phenacetin only in having a lactic acid in place of the acetic acid constituent. It occurs as colorless, odorless, slightly bitter crystals, soluble in 8.5 parts of alcohol, and in 330 parts of water, and decomposed by acids or alkalies. It is an antipyretic and analgesic. Dose, 8 to 15 grains. Marketed also in 0.5 and 0.25 gram tablets.—Mfrs.: C. F. Boehringer & Soehne, Mannheim, Germany; agts.: Merck & Co., New York.

LACTOSANTAL is the trade name adopted for *santalol lactate* or the lactic acid ester of santalol. It contains about 73 per cent. of santalol, and is employed as an internal antigonorrheal as well as a bronchial antiscarrhal. It is marketed only in capsules containing 0.25 Gm. (4 minims), the dose of which is one every hour or ten to fifteen daily.—Mfr.: Vial, of Paris; agts.: E. Fougere & Co., New York.

LACTOSERUM.—See under *serum*.

LACTOSERVE is a buttermilk conserve, consisting of dried milk impregnated with pure cultures of the lactic acid bacillus. Stirred with 5 parts of boiling water is said to furnish a drink very similar to fresh buttermilk.—Mfrs.: C. F. Boehringer & Soehne, Mannheim, Germany; agts.: Merck & Co., New York.

LACTO-SOMATOSE is a compound of tannin with milk albumose, occurring as a yellowish, tasteless, odorless powder, soluble in water, and containing 5 per cent. of tannic acid. It is used as a food, especially in children with intestinal diseases. Dose (child) 1 to 2 teaspoonfuls per day.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

LACTYLPHENETIDIN is *lactophenin*.

LAEKEROL, exploited for the treatment of bronchial troubles, is said to consist of acetic ether, ethereal oil, acetic acid, chinosol, glycerin, alcohol and water.

LAIN is, according to Dr. F. Zernik, an ointment consisting of equal parts of zinc oxide and naftalan or a soda soap containing a petroleum distillate of high boiling-point and very similar to naftalan. It is exploited as an antipruritic and anodyne dermic and endermic antineuralgic. Mfrs.: Lain Co., Berlin W, Germany.

LA-KAMA is a tapeworm remedy marketed as *weak*, each capsule of which contains 1.25 grams of kamala and 0.1 gram of dried extract of pomegranate root bark; and as *strong*, each capsule containing 1.5 grams of kamala and 0.1 gram of dried extract of pomegranate.—Mfrs.: Max Kahnemann, Berlin N, Germany.

LANAGEN and **LANAIN** are brands of *adeps lanæ hydrosus*.

LANDMANN'S PNEUMOCOCCUS SERUM is obtained from horses that have been treated with carefully selected and specially cultivated cultures of pneumococci.—Mfr.: E. Merck, Darmstadt;; agts.: Merck & Co., New York.

LANESIN is said to consist essentially of *adeps lanæ* and aluminium acetate, and is used on insect bites.—Mfrs.: Vereinigte Chem. Works in Charlottenburg, Germany; agts.: C. Bischoff & Co., New York.

LANOFORM is a 1 per cent. formaldehyde ointment made with wool-fat; *lanoform dusting-powder* and *lanoform cream*, both also contain 1 per cent. of formaldehyde. See caution under formaldehyde.

LANOGEN is defined as a mixture of petrolatum or paraffin ointment with a "water-binding constituent of wool-fat." It occurs as a white, smooth, odorless, permanent ointment base, that is readily absorbed and takes up 3 times its weight of water permanently. Being chemically indifferent it is recommended especially as an ointment base for particularly sensitive and unstable chemicals such

as silver nitrate, potassium iodide, etc. Its acid number is 0, its iodine figure 0.5 to 0.8. The unusually great power of taking up water and aqueous solutions is ascribed to the small percentage of free ischolesterin.—Mfrs.: Nord-deutsche Wollkammerei, Delmenhorst, Germany; agts.: V. Koechl & Co., New York.

LANTHYOL is a burn and inflammation ointment composed of lanolin, carbolic acid, ichthyol, alum, oil of thyme and "a stimulating base" (probably the manufacturers' aristoform).

LANULA is a dusting powder containing talcum, boric acid, zinc oxide and tannic acid.

LANUM is a brand of *hydrous wool fat*.—Marketed by Merck & Co., New York.

LARGIN (*protalbin-silver*) occurs as a gray powder containing 11 per cent. of silver and soluble in 10 parts of water, also soluble in glycerin but insoluble in alcohol. It is prescribed as an astringent and bactericide in $\frac{1}{4}$ to 5 per cent. solutions. Internally it is occasionally prescribed in gastric or intestinal ulceration. Dose, 5 to 8 grains in pills. Its solution should be dispensed in dark-amber bottles. Marketed by Merck & Co., New York.

LARIOIN is a synonym of *agaricin*; see under this title.

LATTA'S SERUM.—See serum, Latta's.

LAURENOL is a French disinfectant, marketed as No. 1 (medicinal, and consisting of a solution of copper sulphate, zinc chloride, alum, hydrochloric acid, picric acid, glycerin and water) and as No. 2 (solution of zinc chloride, alum and copper sulphate, intended as a general disinfectant).—Mfrs.: Société du Laurenol, Paris, France.

LAVADO is described as a permanent emulsion of turpentine oil and ammonia water, which is miscible with water without separation of the oil. It is intended for use as a washing fluid as well as a disinfectant.—Mfr.: Dr. W. Sternberg, Chemnitz, Germany.

LAVALUM is an antiseptic and astringent wash containing "zinc phenolsulphonate 10 per cent., alum compound 15 per cent., ichthyol 0.1 per cent., thymol 0.5 per cent., eucalyptol 0.2 per cent., and oil gaultheria 0.5 per cent."—Mfrs.: Norwich Pharmacal Co., Norwich, N. Y.

LAVODERMA is a freely soluble soap containing about 30 per cent. of mercury caseinate and employed in the treatment of parasitic skin diseases.—Mfrs.: Chem. Institut, Berlin SW, Germany.

LAXALITHIA is "a granular, noneffervescent combination of laxative salines, with lithium. Each teaspoonful represents lithium citrate 5 grains, sodium sulphate 60 grains, sodium chloride $3\frac{1}{2}$ grains and sodium citrate q. s."—Mfr.: Eli Lilly & Co., Indianapolis, Ind.

LAXAN is a laxative tablet containing 0.1 gram of phenolphthalein and 0.3 gram of vanillated cacao mass.—Mfrs.: Dr. H. Müller & Co., Berlin O, Germany.

LAXAROME is described as a mixture of three volumes of aromatic fluidextract of cascara and one volume of compound solution of sodium phosphate (aromatized). It is a laxative. Dose, $\frac{1}{2}$ to 1 fluid dram.

LAXATOL is the name applied to several laxative preparations, both here and abroad. One consists essentially of phenolphthalein and is supplied in three strengths; another of a mixture of vegetable laxatives, etc.—Mfr. (of former): Apotheker Linde, Melk, Austria.

LAXATOLINE is the name applied to a 2-grain tablet of *phenolphthalein*.—Mfrs.: Physicians' Supply Co., Pittsburg, Pa.

LAXIGEN is identical with *laxin confection*, which consists of agar-agar, sugar, and phenolphthalein.—Mfr.: Dr. A. Horowitz, Berlin, Germany.

LAXINE is said to be prepared from apples, but to contain as its active ingredient phenolphthalein, 2 grains to each tablet. It is exploited as a laxative.—Mfrs.: Columbus Pharmacal Co., Columbus, O.

LAXOIN is the trade name adopted for 1- and 2-grain chocolate tablets of phenolphthalein exploited in England as a laxative.—Mfrs.: Oppenheimer, Son & Co., London EC, Eng.

LAXOL is castor oil containing a little saccharin and peppermint oil.—Mfrs.: "Laxol," New York.

LAXOTHALEN TABLETS are laxative tablets containing phenolphthalein as their active ingredient.—Mfr.: Pitman-Myers Co., Indianapolis, Ind.

LAZAROL consists, according to Prof. Mörner, of Stockholm, of acetic ether, acetic acid, ethereal oil, glycerin, chinosol, alcohol and water.

LECIBRIN is a combination of brain lecithin 33 $\frac{1}{4}$ per cent. with nucleo-proteins. It is put up in gelatin-coated "pepules each containing 3 grains, the equivalent of 1/25 grain of elementary phosphorus." Nerve-reconstructive like lecithin. Dose, 1 to 3 pepules.—Mfrs.: Fairchild Bros. & Foster, New York.

LECIFERRIN is a sweetened liquid which is said to contain 0.1 per cent. of ovolecithin and 0.3 per cent. of freshly precipitated ferric hydroxide. It is exploited as an appetizer and regulator of digestion.—Mfr.: "Galenus," Frankfurt-on-M., Germany.

LECIN is described as a stable elixir of neutral iron albuminate, containing $\frac{1}{2}$ per cent. of iron, 20 per cent. of alcohol, 10 per cent. of sugar, and aromatics. It is prescribed as a hematopoietic. Dose, a teaspoonful to a dessertspoonful, after meals, in water. Lecin tablets contain

glycerophosphate besides the neutral iron albuminate present in lecin.—Mfr.: Dr. E. Laves, Hanover, Germany.

LECIPLASMA is a nutritive and invigorant consisting essentially of 5 per cent. of lecithin together with aromatics.—Mfrs.: Lüttgen & Co., Berlin SW, Germany.

LECIPON is a lecithin preparation, easily soluble in water and possessing an agreeable taste. It contains 10.5 per cent. of ovolecithin.

LECITHAN is the name given by a Swiss firm to its lecithin.—Mfrs.: Blattmann & Co., Wädenswil, Switzerland.

LECITHCEREBRIN is a lecithin compound obtained from brain substance, and employed as a nerve sedative and hypnotic.

LECITHIN is a phosphorus constituent of animal and vegetable tissues, more especially of nerve substance and yolk of egg. That on the market is made from egg yolk and is hence known also as *ovilecithin*; a yellow, waxy, hygroscopic mass, soluble in alcohol, chloroform, ether and fatty oils, and swelling up but not dissolving in water. It is used as a nerve tonic. Dose, 1 to 2 grains three times daily, in pills, before meals; subcutaneously, 15 to 45 minims of 5 per cent. solution in olive oil.—(Nonproprietary.)

LECITHIN ALBUMINATE.—See *letalbin*.

LECITHIN-ANTISCLEROSIN is antisclerosin with a definite percentage of lecithin, and intended for use especially in cases of arteriosclerosis attended with neurasthenia or nervous debility. Dose, 1 to 2 tablets three times daily.—Mfr.: Wm. Natterer, Munich, Germany.

LECITHIN-EGG OIL is a preparation containing 20 per cent. of lecithin and claimed to be very serviceable for preparing emulsions of cod liver and other oils.

LECITHINERVIN is a mixture of potassium bromide, sodium bromide and lecithin.—Mfr.: Storch Apotheke, Dresden, Germany.

LECITHINOGEN is a secret mixture recommended for various affections, said to consist of 90 per cent. of "liquor calcii ethyl. hypophosphor." and 10 per cent. of cane sugar. According to an analysis by Dr. Aufrecht it contains *hypophosphite* and not the phosphorous acid ester of calcium.—Mfr.: Carl Hunnius, Munich, Germany.

LECITHIN-PERDYNAMIN is perdynamin (a liquid hemoglobin preparation) with 1 per cent. of lecithin added to it. It is prescribed as a hematinic and nerve tonic. Dose, a teaspoonful to a tablespoonful.—Mfr.: H. Barlow-ski, Berlin, Germany.

LECITHIN SOLUTION contains 1.6 grams of lecithin in 100 c.c. of a glycerin-alcoholic menstruum containing 18.5 per cent. of alcohol by volume.—Mfrs.: Fairchild Bros. & Foster, New York.

LECITHMEDULLIN is a lecithin preparation made from bone marrow, and prescribed chiefly in cardiac neuroses, pulmonary edema, etc.

LECITHOL is an emulsion-like solution of lecithin, containing 1 grain of lecithin from hog's brain in each teaspoonful and 18 per cent. of alcohol by volume. It is an opalescent yellow liquid, of pleasant taste and odor. Dose, 1 to 2 fluid drams immediately before or after meals.—Mfrs.: Armour & Co., Chicago, Ill.

LECITHOL is also the name of a liquid preparation of hemoglobin and glycerophosphates made by Apotheke in Schneidemühl, Germany.

LECITHOL RIEDEL is *lecithin* as made by J. D. Riedel Co., Berlin (Germany) and New York.

LECITHOVIN is a tonic preparation containing lecithin, phosphoric acid and hemoglobin.—Mfrs.: R. O. Lindner, Leipsic, Germany.

LECITOGEN (*Jaffé's lecithin-cacao*) contains in each tin 3 grams of lecithin mixed with pure cacao. It is used as an invigorating food especially for nervous and diabetic people.—Marketed by H. Barkowski, Berlin O, Germany.

LEDUMIN is a veterinary antiparasitic consisting of a saponaceous emulsion of petroleum and a small quantity of creolin.

LEINOL is a compound emulsion of linseed oil, "each fluidounce of which represents linseed oil 33 $\frac{1}{4}$ per cent., acid phosphoric dilute 15 minims, codeine sulphate $\frac{1}{2}$ grain, oil cinnamon and aromatics." It is offered as a substitute for cod-liver oil.—Mfrs.: Norwich Pharmacal Co., Norwich, N. Y.

LEISTNER'S TABLETS, exploited for all cases of gastro-intestinal troubles, appear to contain nothing but powdered cascara sagrada bark.

LEMON TEA ("zitronenthee" in German) is a golden-brown tea of pleasant aromatic-acidulous taste, prepared by drying lemons deprived of seeds by a special process that does not entail any loss of the juice or impairment of the aroma of the fruit. It is used for the so-called "lemon-juice cures," and makes a palatable drink.—Mfrs.: Fr. Silkrodt & Cie, Dresden, Germany.

LENICET is a polymerized form of aluminum acetate, occurring as a fine, white powder, of faint, acidulous odor and representing 30 per cent. of aluminum oxide. It is intended as a dry substitute for the well-known solution of aluminum acetate. It is marketed also as *dusting-powder* (containing 10, 20 and 50 per cent. of lenicet respectively), ointment (10 per cent.) and cream, as well as in the form of *perulenicet* (containing 10 per cent. of balsam of peru), which latter is supplied also as dusting-powder and compresses.—Mfr.: Dr. R. Reiss, Berlin N, Germany.

LENIGALLOL (*pyrogallol triacetate, triacetylpyrogallol*), $C_{12}H_{10}O_8$, occurs as a white powder, insoluble in water, and incompatible with alkalis, strong acids or oxidizing agents. It is used as a mild substitute for pyrogallollic acid (pyrogallol) in skin diseases, chiefly chronic eczema, to be applied in 5 to 10 per cent. ointments or pastes.—Knoll & Co., Ludwigshafen (Germany) and New York.

LENIROBIN or *chrysarobin tetra-acetate* was launched as a succedaneum for chrysarobin, to be used like the latter but less poisonous and non-staining. It is soluble in chloroform, insoluble in water.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

LENTACOLIN is an organotherapeutic preparation of fresh crystalline lenses of animals, recommended by Dr. Römer for use in the treatment of senile cataract.—Mfrs.: Meister, Lucius & Brüning, Hoechst, Germany; agts.: V. Koechl & Co., New York.

LENTAMINE is an alkaloid derived from *lentana brasiliensis*, and occurs as a white, odorless, very bitter powder which is soluble in alcohol, but almost insoluble in water. It is employed as an intestinal antiseptic. Dose, 10 to 20 grains.

LENTIN is a trade name applied to *meta-phenylenediamine hydrochloride*, recently recommended as an antidiarrheal in children. See this title.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

LEONTIN is "an aromatized liquid, containing in pleasant form 1 per cent. of the isolated glycoside derived by a special process from the root of blue cohosh." It is offered as an emmenagogue.—Mfrs.: Lloyd Bros., Cincinnati, O.

LEPINE is a French antiseptic solution containing mercuric chloride, carbolic, salicylic and benzoic acids, calcium chloride, bromine, chloroform and quinine hydrobromide.

LEPRINE is described as an emulsion of the toxine of a culture of the bacillus of Hansen, the leprosy bacillus. Injected hypodermically in cases of leprosy, it produces a rise of temperature lasting for several days and, it is said, gradual recovery often follows. Dose (subcutaneously), 10 c.c.

LEPROLIN is a lepra antitoxin prepared by E. R. Rost, and used subcutaneously in the same manner as tuberculin.

LETALBIN or *lecithin albuminate* occurs as a yellow, stable powder containing 20 per cent. of lecithin. It is recommended as a "nerve nutrient" and reconstructive. Dose, 5 to 10 grains three times daily.—Mfrs.: Blattmann & Cie, Wädenswil, Switzerland.

LEUCIN is a solution of neutral iron albuminate, prepared similarly to solution of iron albuminate, save that

the solution of the albuminate is effected not by alkali but by means of a patented process.—Mfr.: E. Laves, Hanover, Germany.

LEUCO-ALIZARIN.—See *anthrarobin*.

LEUCOFERMENTIN is an animal serum, the antiferment content of which has been increased so as to make it correspond to that of normal human blood. It is used locally in the treatment of inflammatory processes where suppurative or fermentative destruction of tissue is to be arrested.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

LEUCROL is advertised as "prepared from a tropical plant unknown in the markets and to botanists." It is marketed as fluidextract and as pastilles, and is intended for use internally [!] in leucorrhea.—Mfrs.: Chem. Fabrik "Erfurt," Erfurt, Germany.

LEVATHIN is marketed by a Berlin firm as a remedy for obesity. It consists, according to Dr. Zernik, of a colored mixture of about 75 parts of cream of tartar, 15 parts of Rochelle salt and 10 parts of sugar.—Mfr.: Dr. A. Erhard, Berlin W, Germany.

LEVETTOL is a so-called radium soap exploited for the treatment of rheumatism, gout, scrophulosis, etc.

LEVULO-CHLORAL is described as being a compound of levulose and chloral that is soluble in water and in alcohol, and has hypnotic action. Dose, 2 to 10 grains; maximum dose, 15 grains.

LEVULOSE (*fructose, fruit sugar; diabetin*) $C_6H_{12}O_6$, is prepared from invert sugar, and occurs as a colorless, odorless, slightly hygroscopic, crystalline powder, readily soluble in water and in diluted alcohol. It is a sweetening agent especially intended for diabetic subjects. Dose, 3 drams to 2 ounces per day.—Mfrs.: E. Schering, Berlin; agts.: Schering & Glatz, New York.

LEVURARGYRE is a *mercury nucleinate* introduced by Trillat, made with the nuclein of yeast, and is analogous to mercuriol. It is without metallic taste and is not attacked by sulphuretted hydrogen. It is prescribed in syphilis. Dose, $\frac{1}{8}$ to 2 grains.—Mfrs.: Adrian & Cie, Paris, France; agts.: E. Fougere & Co., New York.

LEVURETIN is a powdered, dried beer-yeast recommended by Dr. Golinier in diabetes, furunculosis, and chronic eczema, internally. Dose, a teaspoonful three times a day, before meals, in water.—Mfr.: E. Feigel, Lutterbach, Germany.

LEVURINE is another dried yeast prepared specially for medicinal purposes, and used like the preceding article.

LEVURINOSE is a beer yeast that has been dried in a current of cold air. It is used internally like levuretin, in diabetes, furunculosis, chronic eczema, etc. Dose, a tea-

spoonful three times a day.—Mfrs.: J. Blaes & Co., Lindau, Germany.

LIANTHRAL (*extractum olei lithanthracis*), is defined as "coal tar purified from its insoluble constituents but retaining its soluble and volatile ingredients," a benzol extract of coal tar, used in skin diseases in place of the older liquor and tinctura lithanthracis, in the form of ointment, tincture, soap, paste, etc.—Mfrs.: P. Beiersdorf & Co., Hamburg, Germany; agts.: Lehn & Fink, New York.

LIASOL, defined as "*ammonium sulpholiasolate*" is a substance of undivulged chemical nature, but perhaps analogous to ichthyol and used for making sulphur baths, creams, soaps, etc.—Mfr.: Karl Haas, Reutlingen, Germany.

LIBANOL is the ethereal oil of *cedrus atlantica*, of agreeable odor and taste, soluble in alcohol, and insoluble in water. Some consider it a valuable remedy in chronic catarrhs of the respiratory tract, as well as in gonorrhea and cystitis. It is said not to disturb the stomach or irritate the kidneys as oil of sandalwood does. Dose, 15 to 30 minims three times daily, in capsules, or with cod liver oil.—Mfrs.: Schimmel & Co., Miltitz, Germany; agts.: Fritsche Bros., New York.

LIEBICIN is a thick, brown, strongly alkaline liquid having an odor recalling pyridine; it is exploited as a general disinfectant and deodorant.—Mfrs.: Liebicin-Werken, Pirna, Germany.

LIENADEN is a dried extract of the spleen, which is administered in malaria and hypertrophied spleen in quantities of 2 to 6 drams per day.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

LIGNOSULPHITE (*lignosulfin*) is a volatile aromatic fluid obtained as a by-product in the manufacture of cellulose, and containing besides sulphites the ethereal oils, resins and balsamic constituents of the wood. It is used by inhalation in tuberculosis and chronic bronchial catarrh.—Mfrs.: Lignosulphite Co., Hallein, Austria.

LIMANOL is an extract of a Russian peat that is used in Russia as a remedy for rheumatism, gout and the like. *Limanol embrocation* is said to consist of 8 parts of this extract (limanol), 20 parts of ammonia water, 40 parts of soap spirit and 25 parts of chloroform.—Mfr.: Löwenapotheke in Stettin, Germany.

LIMONIN, exploited as a substitute for citarin (sodium methylene-citrate), is, according to Eichengrün, a mixture of paraformaldehyde and sodium citrate. See caution under formaldehyde.

LIMOSAN TABLETS contain piperazin, phenocoll, lithium carbonate, salocoll and glycocollphenetidin acetate.

LINADIN is a dry extract of the spleen, occurring as a dark-brown, almost odorless powder of marked cod liver

oil taste, containing about 1 per cent. of iron and 0.023 per cent. of iodine, and insoluble in water. It is prescribed in anemia, scrofula, enlarged spleen, etc. Dose, 1 to 3 tablets (only so marketed), washed down with water.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle (Switzerland) and New York.

LINIMENTUM CARRAGHENI is described by Wille as an unctuous mass soluble in water, prepared from Irish moss and intended to serve as a substitute for vaselin and oil as a vehicle for antiseptics and other drugs.—Mfrs.: Aegidien-Apotheke, Braunschweig, Germany.

LINOGEN is what Minde calls his analogue of vasogen.

LINOSAN Capsules are said to contain per capsule 0.1 gram each of oils of sandalwood, juniper and linseed, and are used in gonorrhea and vesical catarrh.—Mfrs.: Drs. Hannach & Bloch, Berlin SW, Germany.

LINOVAL is a new ointment-base containing, according to the manufacturer, 93 per cent. of petrolatum, 5 per cent. of the fatty acid of linseed oil, 1 per cent. of ammonia, and 1 per cent. of lavender oil as perfume. It is said to take up 15 per cent. of water and to be permanent provided it is not heated to its melting-point, 31° C. Hence all additions should be made only by cold incorporation.—Mfr.: Richard Schmidt, Altona, Germany.

LIPANIN is an olive oil containing 6 per cent. of free oleic acid, and offered as a substitute for cod-liver oil. Dose, 1 to 2 tablespoonfuls, children proportionately.—Mfr.: C. A. F. Kahlbaum, Berlin SO. Germany; agts.: Lehn & Fink, New York.

LIPANOL is a Bohemian analogue of *lipanin*, a substitute for cod liver oil.—Mfr.: Dr. Rejtharek, Königstadt, Austria.

LIPIODOL and LIPOBROMOL are iodized and brominized oils, containing respectively 40 per cent. of iodine and 33⅓ per cent. of bromine organically combined. Lipiodol is specially intended for subcutaneous use where a pronounced iodine effect is desired. Lipobromol is a pale-yellow liquid soluble in ether or chloroform but insoluble in alcohol or water. It is intended as a substitute per os and hypodermically for potassium bromide, 2 parts being the equivalent of 1 part of the latter. Dose, 15 to 60 grains.

LIPOGENIN is a new Russian ointment base, made in *solid* and *liquid* forms. The former occurs as a porcelain-like, odorless mass of crystalline structure, which instantly melts at body temperature. Liquid lipogenin is a colorless, odorless, oily, neutral liquid crystallizing in the cold.—Mfrs.: Krestowinkow Bros., Kasan, Russia.

LIQUENZYM is "an elixir of the digestive ferments, each teaspoonful of which will digest 3000 grains of coagulated egg albumin when tested according to the directions

given in the U. S. P. (eighth revision) for the valuation of pepsin. One teaspoonful added to one quart of lukewarm milk will produce a firm curd in fifteen to twenty minutes." Dose, 1 or 2 teaspoonfuls shortly before meals, or three or four times a day after meals in indigestion.—Mfrs.: John Wyeth & Bro., Philadelphia, Pa.

LIQUID DE RINGER.—See *serum artificial, Ringer's*.

LIQUIDE DE LOCKE.—See *serum artificial, Locke's*.

LIQUIDON is the fanciful name applied to a disinfectant liquid soap of undivulged composition.—Mfrs.: Apparatenbau-Gesellschaft, Berlin, Germany.

LIQUOR ALUMINI SUBFORMICI is a Latin designation for *alformin*, which is said to be a solution of aluminum formate. See caution as to formates under formaldehyde.

LIQUOR AMMONII ERGOTINICI is a clear, brown liquid, 1 c.c. of which contains 0.3 gram of ammonium ergotinate (equivalent to 3 grams of ergot). It is used for the same purposes as ergot, internally or subcutaneously. Dose, 10 to 30 minims.

LIQUOR FERRI SUBFORMICI is a compound of iron and formic acid analogous to solution of iron subacetate. It occurs as a dark reddish-brown liquid, and contains 3.8 per cent. of ferric oxide (corresponding to 7.7 per cent. of iron subformate). See caution under formaldehyde.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

LIQUOR HÆMINO-ALBUMINATUS is an analogue of hemalbumin, consisting of an aromatized 3 per cent. solution of ferralbumin (Harras).

LIQUOR LIANTHRALE SAPONINATUS is an extract of lianthral mixed with tincture of quillaja. It is used like liquor carbonis detergens as a dermic.—Mfrs.: P. Beiersdorf & Co., Hamburg, Germany; agts.: Lehn & Fink, New York.

LIQUOR SANGUINALIS is said to consist of 95 parts of liquid hemoglobin, 2½ parts of natural blood salts, 2½ parts of peptonized muscle albumin, and traces of manganese. It is also marketed as *liquor sanguinalis maltosus*.—Mfrs.: Krewel & Co., Cologne, Germany; agts.: Lehn & Fink, New York.

LIQUOR THIOPHOSPHINI is a syrup of potassium guaiacolsulphonate (known on this market as thiocol) containing also some calcium salts.—Mfr.: Dr. K. Aschoff, Bad Kreuznach, Germany.

LIQUOR THYREOIDEÆ CONSERVATUS is defined as a stable liquid preparation of the thyroid gland of animals which have been treated for some time with potassium iodide or some other iodine compound. Six cubic centimeters represent one thyroid gland. It is used in goiter, obesity, myxedema, etc. Dose, 3 drops three times daily,

gradually increased.—Mfr.: Dr. Marpmann, Leipsic, Germany.

LIQUOR TRIFERRINI.—See *triferrol*.

LIQUORS ORGANO-THERAPEUTIC (Marpmann) are described as "rationally made and stable extracts of the various organs of the body"—parotid gland, thymus gland, bronchial glands, pituitary body, brain substance, pancreas and testes.—Mfrs.: Institute of Dr. Marpmann, Leipsic, Germany.

LITHION is defined as "a sodium-lithium sulphate" having laxative and cholagogue properties.—Mfr.: Wm. S. Merrell Chem. Co., Cincinnati, O.

LITHION DIURETIN is theobromine-lithium and lithium salicylate, or, as it is commonly designated, *theobromine and lithium salicylate*; see this.

LITHIUM AGARICINATE is a white powder readily soluble in water and administered in doses of $1\frac{1}{2}$ to 3 grains at bedtime to arrest phthisical night-sweats.—Mfrs.: J. D. Riedel Co., Berlin and New York.

LITHIUM ARRHENAL is *lithium monomethylarsenate*, and forms very deliquescent crystals soluble in water. It is used as an alternative and relatively non-toxic arsenical like the corresponding sodium salt (arrhenal). Dose, 1 to 3 grains twice daily, with meals, in water or as pills.

LITHIUM AND CAFFEINE SULPHONATE. See *symphorol L*.

LITHIUM CITRO-QUINATE is a gout compound made by Dr. A. Voswinkel of Berlin, something like urosin (defined as lithium quinate). Dose, 5 to 15 grains.

LITHIUM-FERROSOL is ferrosol containing also a lithium salt.

LITHIUM GLYCERINOPHOSPHATE (*glycerophosphate* or *phosphoglycerite*) has the formula $\text{Li}_2\text{PO}_4\text{C}_3\text{H}_5(\text{OH})_2$ and occurs as a white powder readily soluble in water. It is used chiefly in gout associated with nervous weakness. Dose, 5 to 15 grains three times daily, as powders, syrup, or solution. Its liquid preparations do not keep but a few days; they should be prepared with sterile water, and in small quantities at a time.—(Nonproprietary.)

LITHIUM-MERCURY IODIDE (*lithiomericuric iodide*) is better known as *mercuricide*. It is a double salt containing 34 per cent. of Hg, 65 of I, and 1 of Li, freely soluble in water, not precipitated by fixed alkalies, hence not decomposed by the blood, and claimed to be a stronger germicide than the older mercuric salts in general yet less toxic (because it contains less mercury).—Mfrs.: Smith, Kline & French, Philadelphia, Pa.

LITHIUM QUINATE (*chinate*) is described under its trade name, *urosin*.

LITHIUM VANADATE (*lithium meta-vanadate*), **LIVON**, occurs as a yellowish powder, soluble in water. It has been used in gout—1/15 grain per day every two or three days, in water.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

LITHOS is the name applied to tablets, each of which is said to represent 4 grains of "combined lithium citrate and tartrate, with 1/2 grain of sodium salicylate." The article is employed as an antipodagric and antirheumatic.—Mfrs.: H. K. Mulford Co., Philadelphia, Pa.

LITHOSAN (*cholosan*) is reported to consist essentially of 75 parts of peppermint water containing some lithium salt, 100 parts of glycerin, 100 parts of aqueous tincture of rhubarb, 20 parts of cola wine, 15 parts of cognac, 10 parts of sodium bicarbonate, 10 parts of elixir of orange, 1 part of extract solution of chelidonium, 2 parts of extract muira, 5 parts of extract of valerian and 2 parts of tincture of castoreum. It is employed in gall-stone disease.—Mfr.: Chem. Fabrik Ernst Wuckow, Berlin SO, Germany.

LITHOSANOL is a gall-stone and renal calculus remedy of complex vegetable composition, containing, besides, 1 gram of salicylic acid and 4.5 grams of lithium citrate per liter.—Mfrs.: Laboratorium Bauer, Kötzensbroda, Germany.

LITHYOL is a product claimed to be identical with *ichthyol*, made by Sandoz & Co., Basle, Switzerland.

LITOLEIN is defined as a product obtained by distillation from petroleum and petrolatum at a certain temperature and pressure. It occurs as a saffron-yellow liquid, neutral in reaction and nonsaponifiable. Litolein is offered as an antiseptic and antiparasitic dermic.

LIVER DRIED (*hepar siccatum*) represents five times its weight of the fresh ox liver. It is used in cirrhosis of the liver and Banti's disease. Dose, 1 dram three or four times a day.—(Nonproprietary.)

LODAL is prepared by the oxidation of laudanoline, an alkaloid from opium. It is uterine hemostatic, but at the same time slows the heart's action and raises the blood pressure. Dose, 1 to 3 grains. Marketed in 1-grain "tablets."—Mfrs.: Burroughs, Wellcome & Co., London and New York.

LOFOTIN is so-called "hydroxyl-free cod liver oil." Marketed also combined with 0.01 per cent. of phosphorus, and with 5 per cent. of creosote carbonate.—Mfr.: J. E. Stroschein, Berlin SO, Germany; agts.: Fischer Chem. Importing Co., New York.

LOFOTOL is cod liver oil impregnated with carbon dioxide gas, whereby the natural taste of the oil is destroyed.

LORETIN is chemically *meta-iodo-ortho-oxy-quinoline-sulphonic acid*, $C_8H_4N.I.OH.SO_3H$, and forms a yellow, nearly odorless powder, only slightly soluble in water or alcohol, almost insoluble in ether or fatty oils, and containing 36.2 per cent. of iodine. It is used as a wound antiseptic in place of iodoform—as powder, ointment, colloidion, etc.; recently recommended also in tuberculosis and other infectious diseases, 3 to 8 grains three times a day. (See also *griserin*.)—Mfr.: Theo. Schuchardt, Görlitz, Germany.

LORETIN-BISMUTH.—See *bismuth loretinate*.

LORETIN-SODIUM.—See *griserin*.

LOSOPHAN is a *tri-iodo-meta-cresol*, $C_6H_2.OH.CH_3$, which results from the action of potassium iodide upon sodium ortho-oxy-para-toluylate. It occurs as colorless needles, contains about 80 per cent. of iodine, is easily soluble in ether, chloroform or fatty oils, sparingly soluble in alcohol, and insoluble in water. Has been used in 1 to 3 per cent. ointments or paints in fungous skin diseases, but is rarely prescribed nowadays.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

LOZAK is "a lacto-albumen product, containing all the albuminoids, fats and minerals of the original milk; highly palatable and easily retained." It is advertised as a dietetic particularly in stomach trouble. Mfrs.: Armen Co., Baltimore, Md.

LOZON is a brand of solution of *hydrogen peroxide*.

LUBRAL is "an antiseptic and bland lubricant for general use in medical and surgical practice."—Mfrs.: Schiefel & Co., New York.

LUBRASEPTIC is a jelly prepared from Irish moss, containing 2 per cent. of boric acid and 0.067 per cent. of formaldehyde. It is put up in screw-cap collapsible tubes and sterilized. It occurs as a colorless, transparent jelly almost completely soluble in water. It is used mainly as an antiseptic lubricant for the fingers or for surgical instruments; it is also used as a dressing for burns, abrasions and slight cutaneous lesions.—Mfrs.: Russell & Lawrie, Tarrytown, N. Y.; agts.: Van Horn & Sawtell, New York.

LUCILLINE is a brand of *petroleum*.

LUESAN (*mercuroglidine*) is a compound of mercury with the vegetable abumin glidine, marketed as tablets, each representing $\frac{1}{6}$ grain of metallic mercury. It is offered as a succedaneum for mercuric chloride and the usual mercurials as an antiluetic. Dose, 1 to 3 tablets three times a day.—Mfr.: Dr. V. Kloppe, Dresden-Leubnitz, Germany; agts.: Menley & James, New York.

LUPINA POWDER consists, according to the manufacturers, of a mixture of condurango extract, citric acid, pepsin, calcined magnesias, magnesium peroxide, cane sugar,

milk sugar, wheat starch and menthol. It is exploited as an antidiyspeptic and antacid remedy.—Mfrs.: Dr. Bamberger & Co., Wiesbaden, Germany.

LUTEIN is the name applied to "tablets containing 0.3 gram of the dried yellow substance of cows' ovaries." The article is used in certain female complaints. Dose, 1 to 3 tablets three times adily.—Mfr.: Dr. Henschke, Breslau, Germany.

LYCETOL is *dimethyl-piperazin tartrate* $(C_2H_4)_2(NCH_3)_2.C_4H_4O_6$. It occurs as a white, odorless, slightly hygroscopic powder of pleasant, acidulous taste, and readily soluble in water. It is incompatible with alkalis. It was introduced as a substitute for piperazin in gout and gravel. Dose, 4 to 8 grains four times a day in carbonated water, sweetened if desired.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

LYGOSINE is the name by which Fabinji introduced *di-ortho-cumar-ketone* or *di-ortho-orydibenzyl-acetone*, a condensation product of salicylic aldehyde and acetone, but now given to the *sodium* salt of the latter. This crystallizes in glossy, greenish prisms that dissolve in about 16 parts of water at room temperature, to form a red solution; acids decompose it. It is prescribed as an antiseptic astringent (in gonorrhea chiefly) in 2 to 5 per cent. solutions. The article has been withdrawn from this market.

LYKRESOL is a solution of crude cresol made by the aid of soap, and used as a disinfectant.

LYMPHOL is a cod liver oil emulsion containing also "chinacinnol," an aromatic extract of cinnamon and cinchona. Besides this article three *silicium lymphols*, for use especially in rickets, necrosis and the like, are marketed by W. Lakemeier, Mühlheim, Germany.—Finally, C. D. Wedmore, of Berlin, Germany, makes an ointment base which he calls "lymphol," and which is employed in ruptures.

LYMPH-ORCHITIC FLUID COMPOUND is an organo-therapeutic preparation for use in impotence, presinility, neurasthenia, etc. It is also known as Roberts-Hawley Lymph Compound.—Mfrs.: New Animal Therapy Co., Chicago, Ill.

LYPTOL. See *lysan*.

LYSAN, originally called *lyptol*, is obtained by the action of formaldehyde upon certain terpenes or substances allied thereto (eucalyptol, menthol, eugenol, etc.), and dissolving the resulting product in alcohol. It is put forward as a surgical disinfectant. For a caution regarding formaldehyde compounds see *formaldehyde*.—Mfrs.: Victoria-Apotheke, Berlin, Germany.

LYSARGINE is a new trade name for *colloidal silver*, which preparation is better known on this market by the name of *collargol*. It occurs as steel-gray, shining scales,

readily and quickly soluble in water. It is used just like collargol.—Mfrs.: Kalle & Co., Biebrich, Germany.

LYSIDIN (*amidine*), $C_4H_6N_2$, occurs as small, colorless, very hygroscopic needles, having a mousy odor, and readily soluble in water or alcohol, and soluble also in chloroform, but insoluble in ether. It is marketed only in 50 per cent. solution, a pinkish-yellow liquid which is claimed to be a uric acid solvent. Dose, 15 to 75 minims per day, in carbonated water. Incompatible with mercuric chloride and iodide, and ferric chloride.—Mfrs.: Meister, Lucius & Brünig, Hoechst, Germany; agts.: V. Koechel & Co., New York.

LYSITOL is an Austrian analogue of *lysol* and thus similar to the official *liquor cresolis compositus*.—Mfr.: J. L. Roessler, Prague, Austria.

LYSOCHLOR is a mixture of chloro-m-cresol and soap.

LYSOFORM is essentially a perfumed solution of a potash soap impregnated with formaldehyde, known on this market as *veroform*, which see.

LYSOL is obtained "by dissolving in fat and subsequently saponifying the fraction of tar oil that boils between 190 and 200° C." It contains 50 per cent. of creosols, and is a clear, brown, oily liquid, of carbolic-creosote-like odor, and soluble in water, alcohol, glycerin, or chloroform. The official *compound solution of cresol* is an analogous product. It is employed as a surgical and gynecological antiseptic, in $\frac{1}{2}$ to 3 per cent. solutions. *Lysol pills* (Dr. Zinsser's) contain in each pill 0.1 gram of lysol with ferrous lactate.—Mfrs.: Schillke & Mayr, Hamburg, Germany; agts.: Lehn & Fink, New York.

LYSOLVEOL is a disinfectant said to contain besides water, 44.5 per cent. (by vol.) of cresols and 33 of linseed oil potash soap; a brown liquid, soluble in water, and used like lysol.

LYSOPAST is a brown, transparent, soft mass, consisting of 90 per cent. of lysol and 10 per cent. of a neutral soap.—Mfr.: C. F. Hausmann, St. Galen, Switzerland.

LYSULFOL is defined as a compound of lysol containing 10 per cent. of sulphur; a thick, black liquid, completely soluble in water. It is employed in skin diseases.—Mfrs.: Schülke & Mayr, Hamburg, Germany; agts.: Lehn & Fink, New York.

LYTHOL is a liquid antiseptic the active ingredients of which are eucalyptol, thymol, oil of wintergreen, and borates. It is used from full strength down to 1:6 dilution.—Mfrs.: Hudson & Co., New York.

LYTROL is a liquid disinfectant consisting, according to Dr. J. Kochs, of an alcoholic solution of *sapo kalinus* containing about 20 per cent. of beta-naphthol in the form of potassium beta-naphtholate. It occurs as a clear, brown liquid of alkaline reaction, specific gravity 1.01, and foam-

ing slightly when shaken. It has a faint phenolic odor. With water it yields a slightly opalescent, clear, yellow solution. It is employed as a disinfectant and deodorant like compound solution of cresol.

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MACALANIN is *potassium amylate*, a caustic milder in action than potassa. Dr. Kuchi Ogata describes the following method of preparation: Rice well washed with water is strewn upon the bottom of a glass capsule in a layer 1 cm. thick. Ten per cent. solution of potassium hydroxide is then poured upon it, and the mixture let stand for six to eight hours. When the rice granules have become transparent, the excess of potassa solution is decanted and the residue carefully washed with water. The remaining mass is then thoroughly rubbed up in a porcelain mortar until a colorless, sticky, gelatinous mass results, which is strongly alkaline and represents "potassium amylate."

MACIN PASTILLES, for reducing flesh and purifying the blood, consisting essentially of iron lactate, quinine hydrochloride, potassium citrate, sodium sulphate, and guaiac wood.—Mfr.: H. Kracht, Düsseldorf, Germany.

MAGNESIUM CACODYLATE, an arsenical compound, said to be comparatively non-toxic, occurs as a white powder soluble in water. It is used chiefly subcutaneously —8 to 15 minims of a 5 per cent. solution daily.—(Nonproprietary.)

MAGNESIUM PERHYDROL is a brand name for *magnesium peroxide* (dioxide) as made by E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

MAGNESIUM PEROXIDE, MgO_2 , is not the pure and simple chemical as marketed, but a mixture of peroxide 15 to 25 parts with magnesium oxide 75 to 85 parts. It occurs as an odorless, white powder insoluble in the ordinary organic solvents. It is used as an oxidizing disinfectant and antizymotic in gastrointestinal fermentation, and in large doses as a laxative; furthermore, it serves as an oxygen producing ingredient of tooth powders and tooth pastes. It is marketed by various firms under special trade names. Dose, 5 to 15 grains; as a laxative, $\frac{1}{2}$ teaspoonful.

MAGNESIUM SULPHITE, $MgSO_3 + 6H_2O$, occurs as a white crystalline powder, soluble in about 30 parts of water. It is used as an antizymotic and disinfectant in dysentery and other infectious diarrheas; it has no pronounced disagreeable taste, and is therefore deemed preferable to sodium sulphite. Dose, 15 to 30 grains every two hours; children 3 to 8 grains, in sweetened solution.—(Nonproprietary.)

MAGNESOL is a trade name for effervescent solution of magnesium citrate. The article is marketed with, and without, sugar.—Mgr.: Phil. Röder, Vienna, Austria.

MAGNODAT is a trade name for *magnesium peroxide*, as marketed by Chem. Fabrik, Coswig, Germany.

MAGOLAN is an antidiabetic marketed in pill form and consisting essentially of "calcium anhydrooxydiamine phosphate and the dried fruits of *lupinus arabeus*, a leguminosa growing in Soudan."—Mfr.: O. Braemer, Berlin SW, Germany.

MAKROBIOSE (*macrobiose*) is a nutritive said to consist of the organic nutrients and a liberal quantity of salts. It occurs as a light-brown powder in which coarse, yellowish-white, particles can be seen and having an odor like that of cacao and a flat slightly saline taste.—Mfr.: Dr. J. Merking, Düsseldorf, Germany.

MALAKIN is *salicyl-para-phenetidin*, $C_6H_4(OC_2H_5)N-CH_2C_6H_4.OH + H_2O$, a condensation product of salicylic aldehyde and para-phenetidin. It forms fine, yellow needles, insoluble in water, slightly soluble in alcohol, and quite freely soluble in solutions of alkali carbonates. It is an antipyretic and antineuralgic; also a tæniifuge. Dose, 8 to 15 grains several times daily.—Mfrs.: Gesellschaft für Chem. Industrie, Basle, Switzerland; agts.: Meyer Bros. Drug Co., St. Louis, Mo.

MALARIN (*acetophenone-phenetidin*), $C_6H_5C(CH_3):N-C_6H_4OC_2H_5$, is a condensation product of acetophenone and para-amidophenetol; light-yellow crystals, insoluble in water, slightly soluble in alcohol. It acts as an antipyretic and antineuralgic. Dose, 6 to 10 grains two or three times daily.—Mfrs.: Valentiner & Schwarz, Leipzig-Plagwitz, Germany; agts.: C. Bischoff & Co., New York.

MALLEIN (Dr. Foth) is a glanders serum used as a diagnostic of glanders in horses. It is marketed in liquid as well as dry form. Dose, of liquid, 1 c.c. per injection; of dry, $\frac{1}{2}$ to $\frac{3}{4}$ grain.—Mfrs.: Serum-Gesellschaft, Landsberg, Germany.

MALONAL is another name for *veronal*, which see.—Mfrs.: Fritz-Petzoldt & Süß, Vienna, Austria.

MALOUREA is another trade name adopted for *malonylurea* (*veronal*).

MALTIN is an old-time synonym of *malt diastase*.—(Nonproprietary.)

MALTOCRYSTOL is a "malt extract in crystal form" marketed in combinations with iron, hemol, pepsin, etc., and offered as a nutritive and tonic. Dose, a teaspoonful to a tablespoonful.—Mfr.: Dr. Chr. Brunnengraber, Rostock, Germany.

MALTO-FERROCHIN is said to consist of detannated wine of cinchona, ferrated extract of malt, iron and quinine citrate and water.

MALTOGEN is a non-hygroscopic, scaly extract of malt.—Mfrs.: Tropon Works, Vienna and New York.

MALTO-HAIMOSE is said to contain pepsin, hydrochloric acid, blood albumin and maltose. It is exploited as an appetizer and roborant in anemia, rachitis, etc.—Mfr.: Dr. Herm. Stern, Munich, Germany.

MALTOSIKAT (maltosiccate) is what an Austrian firm calls its dried extract of malt.

MALTYL is defined as a dry malt extract consisting of about 90 per cent. of soluble carbohydrates, 7 per cent. of soluble albumin and 2 per cent. of nutritive salts. It is offered as a nutritive and tonic. Dose, 1 to 2 teaspoonfuls.—Mfr.: Gehe & Co., Dresden, Germany.

MALTZYME is, according to the Chemical Laboratory of the American Medical Association, a preparation essentially equivalent to the official extract of malt and containing 7 per cent. of alcohol. It is marketed plain and in various medicamentous combinations.—Mfrs.: Malt Diastase Co., New York.

MAMI is defined as "a sterilized, diastatic extract of malt and milk." It is used as an infant food.—Mfr.: Apotheke Quander, Königssee, Germany.

MAMMALA is a milk powder for infants' use simply diluted with water for each feeding.—Mfrs.: Schieffelin & Co., New York.

MAMMARY GLAND EXTRACT is used in the treatment of profuse and painful menstruation and of uterine and ovarian tumors.

MAMMOSAN is a remedy for mastitis in cattle, consisting essentially, according to the manufacturer, of an ointment base impregnated with oxygen. According to Dr. Aufrecht's analysis, the article contains no oxygen but oil of pine.—Mfr.: Felix Wecker, Jr., Rostock, Germany.

MAMOS is the new registered name for what was hitherto known as tabloids mammary substance 5 grains each.—Mfrs.: Burroughs, Wellcome & Co., London and New York.

MANDRAGORINE is an alkaloidal substance isolated from mandragora officinarum, and at first believed to be a distinct alkaloid, but later declared by Thoms and Wentzel to be an *impure hyoscyamine*, consisting predominantly of the latter alkaloid and a base belonging to the piperidine series, the properties of which have as yet not been determined.—Mfrs.: James Alkaloidal Co., St. Louis, Mo.

MANGANESE ALBUMINATE D. Vitali prepares by stirring the whites of three eggs with water, setting aside, straining through linen, carefully stirring in 1 fluid ounce of 5 per cent. solution of potassium permanganate, and evaporating the solution on glass plates at 30° C. It

occurs as brown, nearly tasteless scales, slowly soluble in cold water, and said to keep well in solution and to be very assimilable.

MANGANESE GLYCERINOPHOSPHATE, $\text{MnPO}_4\text{C}_3\text{H}_5(\text{OH})_2 + \text{H}_2\text{O}$, is a yellowish-white powder, soluble in water and employed in the same dose and for the same purposes as iron glycerinophosphate.—(Nonproprietary.)

MANKA Capsules (Dr. Hirsch) contain oil sandalwood, arbutin and ethereal extract of buchu. They are used in gonorrhea, cystitis and prostatitis.—Mfrs.: Strauss-Apotheker, Berlin C, Germany.

MANNIN is the name selected for a substance claimed to be identical with *orthoform*.

MANOLA is exploited as a tonic and restorative. According to analysis made in the laboratory of the American Medical Association, it is essentially wine fortified with alcohol and a slight percentage of medicinal substances added.—Mfrs.: Manola Co., St. Louis, Mo.

MANUFORM is a formaldehyde-soap cream intended for use by surgeons and obstetricians as a disinfectant of the hands.—Mfrs.: Simon's Apotheke, Berlin C, Germany.

MARACH, also known as *Denver mud*, is a sterilized, antiseptic poultice material, analogous to the official cataplasm of kaolin.—Mfrs.: Columbia Chem. Co., Denver and New York.

MARETIN is *carbaminoic acid meta-tolyhydrazid*, a methylated acetanilid in which the acetyl group has been replaced by the group NH.NH.CONH_2 . It forms white, shining, nearly tasteless crystals, soluble in 1050 parts of water and 95 parts of alcohol, almost insoluble in ether or chloroform. It is prescribed as an antipyretic, chiefly in phthisis. Dose, 3 to 8 grains once or twice a day.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

MARINA is a filtered, carbonated sea water, employed first by Dr. G. Fodor in chronic gastrointestinal catarrh, dyspepsia, diabetes, etc., also as a mild purgative, in doses of $\frac{1}{4}$ to $\frac{1}{2}$ tumblerful.—Mfr.: Apotheker Kromirski, Abbazia, Russia.

MARKASITE is a native bismuth oxychloride used in preparing a 5 per cent. superfatted soap; not the mineral marcasite (ferric disulphide).—Mfrs.: P. Belersdorf & Co., Hamburg, Germany; agts.: Lehn & Fink, New York.

MARKASOL is defined as *bismuth borophenate* of the formula $\text{Bi}_2\text{O}_3\text{B}(\text{C}_6\text{H}_5)(\text{CO}_2)_2\text{H}_2\text{O}$. It occurs as a white powder smelling strongly of camphor and having a burning taste. It is intended chiefly as a surgical antiseptic instead of iodoform.—Mfrs.: Kress & Owens Co., New York.

MARMOREKIN is a new name for the well-known *Mar-morek's antistreptococcus serum*, which is used subcutane-

ously in erysipelas, puerperal fever, tuberculosis, etc., in doses of 5 to 20 c.c.

MARROL is an English dietetic consisting chiefly of malt extract, bone marrow and calcium phosphate.

MARSITRIOL is a trade name for *iron glycerinoarsenate*; which see.

MARSYLE is a French trade name for *iron cacodylate*; see the latter.—Mfrs.: F. Gomar Fils & Co., Paris, France.

MARTOL is a syrupy extract of cacao shells, containing iron, mineral salts, phosphoric acid, theobromine and carbohydrates. It is exploited as a hematinic and roborant.—Mfrs.: J. E. Stroschein, Berlin SO, Germany; agts.: Fischer Chem. Importing Co., New York.

MASSOGRAN is a milk-curdling powder that owes its activity to the presence of cultures of the lactic acid bacillus.—Mfrs.: A. H. Cox & Co., Brighton, Eng.

MASSOLIN is a culture of the bacillus *bulgaricus* of Massol. It is said to prevent the growth of pathogenic germs and putrefactive organisms. It is used topically in suppurative conditions, chronic nasal catarrh, atrophic rhinitis, etc. It is put up in $\frac{1}{4}$ oz. vials.—Mfrs.: Lederle Antitoxin Laboratories, New York; agts.: Schiefelin & Co., New York.

MATTAN is a petrolatum ointment and is marketed as such or combined with zinc oxide, sulphur, or both in admixture.—Mfr.: Fritz Kripke, Berlin, Germany.

MAUKELAN is a thigenol ointment intended for use in mange, scabies, eczema and other veterinary diseases.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle (Switzerland) and New York.

MECONARCEINE is what Laborde calls a substance obtained from opium, free from morphine and soluble in water. It is used as an anodyne. Dose, 1/10 to $\frac{1}{8}$ grain. Marketed in solution put up in hermetically sealed tubes and containing camphor as a preservative.

MEDIGLYCIN is a fluid glycerin soap serving as a vehicle for camphor, thigenol, naphtol and other dermic remedies.—Mfrs.: Chem-Fabrik "Helfenberg," Helfenberg, Germany; agts.: C. Reinschild Co., New York.

MEDINAL is the trade name for a brand of *sodium diethylbarbiturate*; the mono-sodium salt of veronal (diethyl-barbituric acid). It is fully described under its chemical name.—Mfr.: E. Schering, Berlin, Germany; agts.: Schering and Glatz, New York.

MEDIZIN contains ferric hydrate, sodium bicarbonate, sodium chloride and morphine.

MEDOL is the name of a creolin liniment intended for use in veterinary medicine in skin diseases.—Mfr.: Wm. Pearson, Hamburg, Germany.

MEDULLADEN is a pulverulent extract of bone marrow, used in anemia, chlorosis, etc. Dose, 30 to 45 grains thrice daily, as tablets, or in jam or gruel.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

MEDULLIN is said to consist of 500 parts of cod liver oil, 250 of honey, 62 of Peru cognac, 70 of extract of black currant leaves, 50 of extract of juniper berries, and 18 of lemon juice. It is designed for use in asthma, consumption, etc.—Mfr.: Paul Dietrich, Olsnitz.

MEKAMBO, MENIOCAR, MEZI and MEZICO.—See under *nebulates*.

MELACHOL is said to be a solution of sodium citrophosphate, that is to say, sodium phosphate liquefied with the aid of citric acid. It thus appears to be essentially the same as the official *concentrated solution of sodium phosphate*.—Mfrs.: Melachol Pharmacal Co., St. Louis, Mo.

MELAL is said to be a concentrated product prepared from fresh apples, which, by virtue of its natural content of malic and phosphoric acids, together with nutritive salts, gently stimulates digestion.

MELAN is a preparation of melilotus cœruleus; a blackish-brown, oily fluid, of pungent, aromatic odor. It is used pure or as ointment on ulcers, burns, etc.—Mfr.: Apotheker Silberstein, Vienna, Austria.

MELIGRIN is described by the manufacturers as being obtained by the condensation of dimethyloxyquinizine with methylphenylacetamide. It occurs as a white, microcrystalline powder of bitter, somewhat pungent taste, freely soluble in water, and melting at 105° C. It is intended as a succedaneum for migrainin and other antineuralgics of the antipyrine class.—Mfrs.: Hoeckert & Michalowsky, Berlin, Germany.

MELIOFORM is a liquid disinfectant consisting of 25 per cent. of formaldehyde solution, 15 per cent. of aluminum acetate, and a number of indifferent substances. For use, it is diluted with 250 volumes of water, that is, a teaspoonful is added to a quart of water. See caution under *formaldehyde*.—Mfrs.: Lüthi & Buhtz, Berlin SW, Germany.

MENFOR is an ointment consisting of menthol, camphor and methyl salicylate, and employed externally in rheumatism.

MENINGOCOCCUS SERUM is an antitoxic serum derived from the blood of horses immunized against cerebro-spinal meningitis by means of injections of cultures of the diplococcus intracellularis, which micro-organism is considered the cause of the disease in question. Experiments have proved the efficiency of the serum in animals. The addition of sodium nucleinate considerably enhances the immunizing power of the serum. Tests on human beings, it is stated, have been encouraging though

too limited in number as yet to permit of formulating a definite opinion. The serum seems to possess a remarkable agglutinating effect on the blood-serum of patients afflicted with meningitis, whereby it is possible to differentiate genuine and spurious diplococci.

MENSAN is a hydro-alcoholic liquid, said to be prepared from hazel nuts previously deprived of their oil. It is recommended as a hemostyptic, one tablespoonful representing 125 grams of nuts.—Mfr.: Dr. A. Gude, Leipsic, Germany.

MENTHALCAL is a pastille used in throat troubles, consisting essentially of menthol and the constituents of Ems water.—Mfr.: Dr. C. Döpper, Cologne, Germany.

MENTHOBORAL is a catarrh cream; the active constituent is claimed to be menthol boric acid ester.—Mfr.: Paul Gloess, Solothurn, Switzerland.

MENTHOCAPSOL SKALA is a camphorated soap liniment containing menthol and capsicum.

MENTHOFORM is a name applied to a compound which liberates formaldehyde within the body, which name, it should be noted, has already been given to another different preparation. It contains the formaldehyde as a condensation product, the gas being liberated even by contact with the saliva. *Menthoform external* represents tablets containing formaldehyde in combined form and readily decomposing in the presence of hot water into formaldehyde, menthol and boric acid. This article is intended for inhalation purposes. It should be noted that the use of formaldehyde preparations or of compounds that may produce it involves a possibility of bad effect on eyesight. See caution under *formaldehyde*.—Mfr.: C. F. Hausmann, St. Galen, Switzerland.

MENTHOL BORATE.—See *estoral*.

MENTHOL ETHYLGLYCOLATE.—See *coryfin*.

MENTHOL-IODOLE is a mixture of 1 part of menthol and 99 parts of iodole, used principally in throat affections and ozena, by insufflation.—Mfrs.: Kalle & Co., Biebrich, Germany; agts.: Lehn & Fink, New York.

MENTHOL THYMATE is a compound prepared by A. Gawalowski in the form of an oily liquid which is practically odorless or possesses a slight odor of menthol or thymol according as free menthol or thymol predominates. On contact with the moist skin or a mucous surface it decomposes into its components. It is employed externally in rheumatic pains and in headache.—Mfr.: A. Gawalowski, Raitz, Germany.

MENTHOL VALERIANATE.—See *validol*.

MENTHOPHENOL is a compound resulting from heating 1 part of carbolic acid with 3 parts of menthol, and occurring as a clear liquid of aromatic odor and taste, almost insoluble in water or glycerin, freely soluble in

alcohol, chloroform or ether, and readily taking up iodine, iodoform or aristol. It is used as an antiseptic and analgesic locally, either pure or in 3 to 5 per cent. mixture with warm water.—(Nonproprietary.)

MENTHOPHENOL-COCAINE (Bonain) is obtained by melting together equal parts of crystallized carboic acid and menthol at a moderate heat and then incorporating an equal part of cocaine hydrochloric. It is a powerful local anesthetic and dental anodyne.

MENTHOROL (*menthosol*) is para-chlorphenol with menthol (added as a corrigent of taste and odor), which is used in 5 to 15 per cent. solution in glycerin as a paint in laryngeal tuberculosis.—Mfrs.: Von Heyden Chem. Works, Radebeul and New York.

MENTHOL is a 3 per cent. hydrogen peroxide solution containing 1 per cent. of menthol and about 38 per cent. of alcohol, and used in 5 to 10 per cent. solution as a gargle in inflammatory throat troubles. In cold weather the menthol is liable to crystallize out; warming the solution dissolves it again.—Mfr.: C. Raspe, Weissensee near Berlin; agts.: C. Bischoff & Co., New York.

MENTHYMIN, originally called *menthussin*, is described by the manufacturers as a saccharated fluid extract of peppermint and thyme, with syrup of tolu. It is exploited as a remedy for whooping cough, asthma, laryngeal and bronchial catarrh. Dose, adult, a tablespoonful several times daily.—Mfrs.: "Sicco," Berlin, Germany.

MENTHYLGLYCOLATE is described as a tasteless, non-irritant substance possessing the therapeutic properties of menthol. It is used in gastric disorders: nausea, vomiting, etc.

MENTHYPHEN is a liquid antiseptic, stimulant and expectorant for use in throat and bronchial affections, each fluid ounce of which represents phenol 2 grains, thymol, menthol, oil gaultheria, sanguinarine nitrate, and lobeline sulphate, of each 1/12 grain, in glycerite of elm bark.—Mfr.: Wm. S. Merrell Chem. Co., Cincinnati, O.

MERCAURO is a solution of the bromides of mercury, gold and arsenic, used as antisyphilitic and alterative. Each 10 drops contain 1/32 grain each of the bromides of arsenic, gold and mercury.—Mfrs. Parmele Pharm. Co., New York.

MERCOLINT (*mercurlint*) is a cotton fabric impregnated with 90 per cent. mercurial ointment, worn over the chest in syphilis. Apron No. I contains 10, No. II 25, and No. III 50 grams of mercury.—Mfrs.: P. Beiersdorf & Co., Hamburg, Germany; agts.: Lehn & Fink, New York.

MERCOQUINOL (*merochinol*) is *mercury oxyquinoline-sulphonate*, and is intended for use in syphilis internally, subcutaneously or by inunction.—Mfrs.: Fr. Fritsche &

Co., Hamburg, Germany; agts.: Parmele Pharm. Co., New York.

MERCURALGAM, formerly known as *mercuriol* (not *mercurol*), is an amalgam of mercury with aluminium and magnesium, admixed with chalk; a gray powder containing 40 per cent. of mercury, and intended as a substitute for mercury with chalk internally and (chiefly) for mercurial ointment externally in syphilis (5 grams carried in pouches worn over the chest daily).

MERCURAMINE, or *mercury ethylenediamine citrate*, is a solution of 10 parts of mercury citrate, 4 of ethylenediamine, and 86 of water, which is used in 0.3 per cent. dilution instead of 1:1000 solution of corrosive sublimate for disinfecting the hands in surgery, etc. It must be kept in a dark place.—Mfrs.: Zimmer & Co., Frankfort-on-M., Germany; agts.: C. Bischoff & Co., New York.

MERCURAN is a 50 per cent. mercury ointment made with a specially prepared goose oil and containing 1 per cent. of carbolic acid as a preservative. It is intended for the inunction treatment of syphilis, and, according to Dr. E. H. Shields, is rapidly absorbed through the skin, requires less time than ordinary mercury ointment for its application, and is less irritating than similar preparations of mercury on the market. It is supplied in soft gelatin capsules containing 4 grams, which quantity constitutes the inunctionary dose.—Mfrs.: Eusoma Pharm. Co., Cincinnati, O.

MERCURCOLLOID (*mercury colloid*) is a soft ointment of blackish-gray color and aromatic odor, containing 10 per cent. of colloidal metallic mercury. It is intended for external and internal use, in place of blue ointment or blue pill. Dose per os, 2 to 5 grains three times daily, as pills, made with aluminium hydrate (marketed also as such). Mercurcolloid should not be confounded with colloidal mercury (hyrgol).—Mfr.: O. Ebel, Berlin NO, Germany.

MERCURICIDE.—See *lithium-mercury iodide*.

MERCURIOL.—See *mercuralgam*.

MERCURIOL OIL contains 90 per cent. of mercuralgam and is used by injection mixed with an equal quantity of olive oil or oil of sweet almonds.

MERCURIVANILLIN is a preparation containing 40 per cent. of mercury and employed in syphilis.

MERCUROGLIDINE is marketed under the trade name *luesan*, which see.

MERCURO-IODO-HEMOL (*mercuro-iodized hemol*) is a brown powder containing 12.35 per cent. of mercury and 28.6 per cent. of iodine, with hemol. It is prescribed in syphilis accompanied by anemia or scrofula. Dose, $1\frac{1}{2}$ to 2 grains, three times a day, usually in pills, sometimes given subcutaneously.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

MERCUROL (*mercury nucleide, mercury nucleinate*) is an organic compound of mercury with nucleinic acid from yeast, and forms a brown powder containing 10 per cent. of mercury, and soluble in water, but insoluble in alcohol. It is an antipurulent, astringent, and alterative, claimed to be less irritating and of greater penetrating power than the usual mercury salts. It is used topically in ophthalmia, specific gonorrhea, conjunctivitis, etc.; internally in syphilis. Dose, $\frac{1}{2}$ to 2 grains three times a day, in pills (marketed as such, chocolate-coated). Applied in $\frac{1}{2}$ to 5 per cent. solutions or ointments.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

MERCURY AMIDOPHENYLARSINATE. See *mercury atoxylate*

MERCURY-AMMONIUM TARTRO-PHENOLSULPHONATE is better known as *asterol*; which see.

MERCURY ANILINATE, $\text{Hg}(\text{C}_6\text{H}_5\text{NH}_2)_2$, occurs as a white, colorless, tasteless powder, containing 52 per cent. of Hg, and insoluble in water. It is employed in syphilis—by inunction, in 30 to 35 per cent. ointments; by intramuscular injection, rubbed up with vaselin oil; as $\frac{1}{2}$ to 3 per cent. ointment on wounds; and internally $\frac{1}{4}$ to $\frac{1}{2}$ grain three times a day, in pills.—Mfr.: W. K. Ferrein, Moscow, Russia.

MERCURY ATOXYLATE (*atoxyl-mercury*) is described as being "the acid mercury salt of atoxylic acid, containing 23.7 per cent. of arsenic and 31.8 per cent. of mercury. It is a white powder, practically insoluble in water, contains no water of crystallization, and shows a slightly pinkish tinge when heated to 100° C. Its solutions do not precipitate albumin." It is employed mainly as an antisyphilitic, by intramuscular injection, suspended in olive oil, liquid petrolatum or other oleaginous vehicle. Dose, $\frac{3}{4}$ to $1\frac{1}{2}$ grains, twice a week.—Mfr.: Greef, Charlottenburg, Germany; agts.: Victor Koechl & Co., New York.

MERCURY BICHLORIDE CARBAMIDATED, $\text{CO}(\text{NH}_2)_2 \cdot \text{HgCl}_2$, is used subcutaneously in solution prepared by dissolving 0.5 gram of urea (carbamide) in 100 grams of 1 per cent. solution of mercury bichloride; this solution keeps without decomposition only for a few days. The dry salt occurs as white crystals that are soluble in hot water and hot alcohol. Dose, 8 to 15 minims of the solution described.

MERCURY CACODYLATE (*mercuric cacodylate* or *methyl-arsenate*), $[(\text{CH}_3)_2\text{AsO}_2]_2\text{Hg}$, occurs as a white hygroscopic, crystalline powder, soluble in water, and used by intramuscular injection in syphilis. Dose, $\frac{1}{2}$ to 1 grain daily.—(Nonproprietary.)

MERCURY COLLOIDAL OR SOLUBLE.—See *hyrgol*.

MERCURY DIBROMIDE, HgBr_2 , has recently been introduced for hypodermic and internal use in syphilis. It is

sparingly soluble in water, alcohol or ether; hot water decomposes it. For subcutaneous use a solution is made of 1 grain of the dibromide and 0.6 gram of sodium bromide, the latter serving to increase the solubility of the mercury salt and render its solution sterilizable without decomposition.—(Nonproprietary.)

MERCURY-ETHYLENEDIAMINE CITRATE as marketed consists of a solution of 10 grams of mercury citrate and 4 grams of ethylenediamine in 86 grams of water. For use as a hand disinfectant a 0.3 per cent. of this product is employed.—Mfrs.: Zimmer & Co., Frankfurt, Germany; agts.: C. Bischoff & Co., New York.

MERCURY FORMAMIDE SOLUTION contains the salt $\text{Hg}(\text{HCONH})_2$, besides some free formamide. 1 c.c. contains an amount of mercury equivalent to 0.01 gram of mercuric chloride. It is used hypodermically in syphilis, 15 minims every other day.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

MERCURY GALLATE, $\text{Hg}[\text{C}_6\text{H}_3(\text{OH})_3\text{CO}_2]_2$, forms a grayish-brown powder, containing 37 per cent. of mercury, insoluble in water, but soluble in solutions of the alkalies. It is prescribed as an antisyphilitic. Dose, 1 to 3 grains per day, in pills with extract of cinchona.—(Nonproprietary.)

MERCURY IMIDOSUCCINATE.—See *mercury succinimide*.

MERCURY IODOCACODYLATE is obtained in solution by dissolving 1 gram of mercury cacodylate and 2 grams of cacodylic acid in 75 grams of distilled water, adding a solution of 1 gram of sodium iodide in 3 grams of distilled water, neutralizing with dilute soda solution, and adding distilled water to make 100 grams. This liquid is said to be stable and sterilizable, and is used by injection in syphilis—1 to 2 c.c. daily or every other day. Keep from light.

MERCURY NOSOPHEN.—See *apallagin*.

MERCURY OXYCYANIDE, $\text{HgO.Hg}(\text{CN})_2$, is obtained by dissolving the mercury oxide freshly precipitated from 10 grams of mercuric chloride, and 9.5 grams of mercury cyanide in 100 grams of water. It forms a white or faintly yellow powder, soluble in water. It is used as an antiseptic. It is applied in 0.2 to 2 per cent. solution.—(Nonproprietary.)

MERCURY OXYQUINOLINESULPHONATE. See *mercoquinol*.

MERCURY PARA-PHENOLSULPHONATE is *hydrargyrol*.

MERCURY SALICYL-ARSENATE is referred to under *enesol*.

MERCURY SALICYLATE, $\text{HgC}_7\text{H}_5\text{O}_6$, is a white powder containing about 59 per cent. of mercury, and soluble in

solution of sodium chloride or alkalis, insoluble in water or alcohol. It is used in syphilis and gonorrhea. Dose, $\frac{1}{3}$ to 1 grain; applied to ulcers, etc., in 1 per cent. ointment or powder; injected in gonorrhea in 1:300 suspension every second or third day.—(Nonproprietary.)

MERCURY-SODIUM PHENOLDISULPHONATE is described under *hermophenyl*.

MERCURY SOZOIODOLATE.—See *soziodole-mercury*.

MERCURY SUCCINIMIDE, (*mercury imidosuccinate*), $\text{Hg}(\text{C}_4\text{H}_4\text{NO}_2)_2$, occurs as a white powder, soluble in about 75 parts of water, slightly soluble in alcohol. It has been recommended as an agreeable antisyphilitic by injection— $\frac{1}{5}$ to $\frac{1}{3}$ grain daily in 1 per cent. solution. It may be given by mouth in doses of $\frac{1}{6}$ to $\frac{1}{4}$ grain three times daily.—(Nonproprietary.)

MERCURY SULPHOICHTHYOLATE is described under *ichthermol*.

MERCURY TETRAIODOPHENOLPHTALEINATE.—See *apallagin*.

MERGAL is a mixture of "mercuric cholate, $\text{Hg}(\text{C}_{24}\text{H}_{39}\text{O}_6)_2$, one part, and tannin albuminate two parts. It occurs as a greenish-yellow powder of bitter taste, practically insoluble in water but more readily soluble in alkali solutions. It is offered as an antisyphilitic, and the claims are made that it does not produce ptialism, griping or diarrhea, and is non-cumulative. Two and a fourth grains of it equal in mercury content $\frac{5}{22}$ grain of corrosive sublimate. Marketed as $2\frac{1}{4}$ grain capsules, the dose of which is 1 to 3 three or four times daily, after meals.—Mfr.: J. D. Riedel Co., Berlin and New York.

MERKALATOR is the name applied to a face mask which is covered with mull impregnated with mercurial ointment (50 per cent.), and used for the mercury inhalation treatment of syphilis.—Mfrs.: P. Beiersdorf & Co., Hamburg, Germany; agts.: Lehn & Fink, New York.

MESOTAN (*ericin*) is the trade name for *salicylic acid methyloxymethyl ester* or *methyloxymethyl salicylate*, $\text{C}_6\text{H}_4\text{OH.COO.CH}_2\text{OCH}_3$, which occurs as a clear, yellow fluid of aromatic odor, specific gravity 1.2, miscible with alcohol, ether, chloroform and fatty oils. It is used in the main locally in articular and muscular rheumatism, 30 minims, mixed with the same quantity of olive oil, being rubbed in two or three times a day. It is speedily absorbed. After four days its use is generally suspended for a day or two, on account of its irritant action on the skin.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

META - BENZAMIDO - SEMICARBAZIDE.—See *syrogénine*.

METABIASES is the generic name adopted by a French firm for what it describes as "pure, metallic ferments"—gold, silver, platinum and palladium, intended for use by injection in infectious diseases, such as articular rheumatism, pneumonia, scarlet fever, etc.—Mfrs.: Max Frères, Paris, France.

METACETONE is referred to under *diethylketone*.

METACRESOLANYTOL (*metasol*) is said to consist of 40 per cent. of meta-cresol and 60 per cent. of antin, the latter being a 33⅓ per cent. aqueous solution of ichthyol-sulphonic acid. It occurs as a black, thick liquid smelling of ichthyol and soluble in water in all proportions. It is recommended as an application in erysipelas and claimed to be free from irritating effect and without penetrating action.—Mfrs.: Ichthyol Co., Hamburg, Germany; agts.: Merck & Co., New York.

META-CRESOL CINNAMIC ACID ESTER is known in the trade as *hetocresol*, which see.

METACRESOL, SOLIDIFIED, is what a Swiss firm calls its substitute for an analogue of *metakalin*.

META-iodo-ortho-oxyquinoline-anasulphonic ACID.—See *loretin*.

META-PHENYLENEDIAMINE (*meta-diamidobenzene*) **HYDROCHLORIDE**, $C_6H_4(NH_2)_2 \cdot 2HCl$, also known as *lentin*, was heretofore used only as a test for nitrates and for technical purposes. Latterly Dr. Unverricht uses it as an antidiarrheal. Dose, 1½ grains three times daily; children, ⅓ to 1 grain.—(Nonproprietary.)

METAKALIN is described as "a solid preparation of cresol and soap, consisting of a mixture of 80 parts of a new double-compound of three molecules of meta-cresol and one molecule of meta-cresol-potassium (potassium meta-cresylate), with 20 parts of hard soap. Accordingly, it contains 73.5 per cent. of meta-cresol. It is soluble in about 10 parts of water, and is intended as a disinfectant of the hands as well as surgical instruments (1 to 2 per cent. solutions). It is also supplied in 15-grain tablets, for convenient use.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

METAPLASMA is a new dressing material intended for use in the endermic application of salicylic acid and other remedies. It consists of an inner layer of fat-free cotton impregnated with the medicament, and an outer layer of impervious, non-medicated cotton not deprived of its fat and intimately united to the inner layer. The principal metaplasms thus far made are that of *menthol* and *capsicum*, which is employed as a rubefacient, and that of *salicylic acid*, which is used in rheumatism, lumbago, pleurisy, etc.—Mfr.: Dr. L. Larson, Hirschgarten, Germany.

METARGIN is a silver albumin preparation made by Kalle & Co., Biebrich, Germany; agts.: Lehn & Fink, New York.

METASOL.—See under *anytin*.

METHACETIN (*acetanisidin*, *para-oxymethylacetanilid*), $C_6H_4.OCH_3.NH.COCH_3$, occurs as colorless and odorless crystals, readily soluble in alcohol but sparingly soluble in water. It is used as an antipyretic and antineuralgic. Dose, 5 to 10 grains.—(Nonproprietary.)

METHAFORM is a trade name for *chlorbutanol*, which see.—Mfrs.: F. Stearns & Co., Detroit, Mich.

METHARSINAT is a French trade name for *disodium methylarsenate* (not sodium dimethylarsenate or cacodylate).—Mfrs.: Clin & Co., Paris; agts.: E. Fougera & Co., New York.

METHENYL TRIBROMIDE is a synonym of *bromoform*.

METHETHYL is a mixture of ethyl chloride and methyl chloride, employed as a spray from the special tubes in which it is marketed, as a local anesthetic in neuralgias, pains in the joints, etc. It is said to have a more intense and more rapid action than ethyl chloride alone.—Mfr.: Dr. G. F. Henning, Berlin SW, Germany.

METHONAL (*dimethyl-sulphone-dimethyl-methane*), $(CH_3)_2C:(SO_2.CH_3)_2$, is obtained by condensing methyl mercaptin with acetone and oxidizing with permanganate. It occurs in colorless crystals, and is used as a hypnotic. Dose, 15 to 30 grains.

METHOZINE is a synonym of *antipyrin*.

METHYL-ACETANILID or *methyl-phenylacetamide*, is described under its trade name, *exalgin*.

METHYL ACETYLSALICYLATE, also known by the trade name *methyl-aspirin* and *methyl-rhodine*, has the formula $C_6H_4.COOCH_3.OCOCH_3$. It is methyl salicylate in which an H atom has been replaced by an acetyl group. It forms colorless crystals that are soluble in alcohol, ether, glycerin and fatty oils, but are insoluble in water; alkalies decompose it. It is offered as an anti-rheumatic, analgesic and antiseptic, like salicylic acid. Dose, single, 8 to 15 grains; daily, 75 to 120 grains.

METHYL-ASPIRIN.—Trade name for *methyl acetylsalicylate*, which see.—Mfr.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

METHYL-ATROPINE BROMIDE—See *atropine methylbromide*.

METHYL CHLORIDE (*chloro-methane*), CH_3Cl , is a gas of ethereal odor, obtained by distilling methyl alcohol, salt and sulphuric acid. It is marketed only compressed to a liquid in metallic cylinders, and is employed as a local anesthetic in neuralgias, etc., as a spray.—(Nonproprietary.)

METHYL GALLATE is referred to under *gallicin*.

METHYL-GLYCOCHOLIC-ACID-PHENETIDID is a chemical designation for *kryofine*.

METHYL-HYDRASTIMIDE HYDROCHLORIDE. See *amenyl*.

METHYL OXYAMIDOBENZOATE is what a Swiss manufacturer has named his analogue of *orthoform*.

METHYL-PROPYL-CARBINOL URETHANE, or *methyl-propyl-carbinol carbamic-acid ester*, is marketed as *hedonal*, which see.

METHYL-RHODIN is a French trade name adopted for *methyl acetylsalicylate*, which see.

METHYLSULFONAL is the name given to *trional* (sulphonethylmethane U. S. P.) in the German Pharmacopœia.

METHYL-XANTHINE, METHYL-XANTHINE and SODIUM ACETATE, and METHYL-XANTHINE and SODIUM SALICYLATE are facsimiles respectively of *theobromine*, *aguarin* and *diuretin*—Mfr.: J. Wolfenberg, Basle, Switzerland.

METHYLDINE, or "ung. methyl salicyl comp.," is an ointment extensively advertised in the medical press as a topical antirheumatic and antineuralgic. It is said to consist of "menthol, camphor, oil of birch, lanolin, etc." It is applied by inunction, the part being covered with flannel or absorbent cotton after each application. The article is marketed in collapsible tubes.

METHYLENE is a trade name applied to the old "methyl bichloride" of Richardson, a general anesthetic consisting of a mixture of 1 volume of methyl alcohol and 4 volumes of chloroform. As this preparation contains methyl alcohol, now known to be an active poison and to produce blindness, it should best never be used.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

METHYLENE BLUE is an anilin product which is used as an antimalarial and a urinary disinfectant, and to a very limited extent also as an analgesic (subcutaneously). It is *official* under the title *methylthionine hydrochloride*. Care should be taken to dispense only the *medicinal* grade; the ordinary dye contains zinc and arsenic, and is not fit for medicinal use.

METHYLENE-CREOSOTE is referred to under *pneumin*.

METHYLENE-DIANTIPYRIN.—See *formopyrin*.

METHYLENE-DICOTOIN is better known as *fortoin*; see the latter.

METHYLENE-DIGUAIACOL is known by several trade names: *geoform*, *guaiaform*, and *pulmoform*. It occurs as a yellow, tasteless powder, with a faint vanilla-like odor; soluble in alcohol, insoluble in water. It is used in consumption chiefly. Dose, 5 to 15 grains three or four times a day, as powders. See caution under *formaldehyde*.

METHYLENE-DIGUAIACOL, ACETYLATED.—See *euguform*.

METHYLENE-DIGUAIACOL BENZOIC ACID ESTER is the chemical designation for *guaialin*.

METHYLENE-DIGUAIACOL CAMPHORIC ACID ESTER is marketed and here described under the name *camphacol*.

METHYLENE-DITANNIN is *tannoform*.

METHYLENE GUAIACOLACETYLATE is the appellation adopted for a brand of the product heretofore known only as euguform. See caution regarding methylene compounds under formaldehyde.

METHYLENE-HIPPURIC ACID, $C_6H_5CO.N:(CH_2)_2CO.O$, is intended as a urinary disinfectant and uric acid solvent; it readily splits off formaldehyde.—(Nonproprietary.)

METHYLETS are soluble gelatin pearls containing methylene blue 1 grain, santal oil $1\frac{1}{2}$ grains, copaiba $1\frac{1}{2}$ minims, oil of cinnamon $\frac{1}{2}$ minim. Antigonorrheal. Dose, 1 or 2 pearls three or four times daily.—Mfr.: Sharpe & Dohme, Baltimore, Md.

METHYLKETO-TRIOXYBENZENE is referred to under the title *gallacetophenone*.

METRAMINE is what is claimed to be a specially pure grade of *hexamethylenamine*.

METROGLYCERIN is defined as a supposedly sterile liquid, containing 10 per cent. of glycerin, 2 per cent. of gelatin, and minimal quantities of resin acid esters. It is used by intrauterine injection as a uterine contractor and hemostatic. Tetanus germs may exist in gelatin and are difficult to destroy. Imperfectly sterilized solutions have in hypodermic use caused fatal infection and there may be risk from uterine or rectal injection also.—Mfrs.: Chem. Fabrik "Helfenberg," Helfenberg, Germany; agts.: C. Reinschild Co., New York.

MICROCIDIN is a trade name for *sodium betanaphtholate*, which is used as a surgical disinfectant in 3 to 5 per cent. solution.

MIDY'S MIXTURE is described as a solution of 0.05 gram of subcutin (anesthesin sulphocarbolate), 0.1 gram of mercury biniodide, 0.1 gram of sodium iodide, 0.02 gram of sodium chloride, and distilled water to make 100 c.c.

MIGRAININ, also called *phenazone-caffeine citrate*, is a mixture consisting according to an analysis made at the chemical laboratory of the American Medical Association of antipyrin (phenazone) 90.97 per cent., caffeine 8.53 per cent., and citric acid 0.51 per cent., the balance being moisture. It occurs as a white powder soluble in water and alcohol. It is used in migraine, headaches, neuralgias, etc. Dose, 5 to 10 grains.—Mfrs.: Meister, Lucius & Brünig, Hoechst-on-M.; agts.: V. Koechl & Co., New York.

MIGRANOL is a headache embrocation consisting essentially of a 10 per cent. solution of menthol in acetic

ether, to which 4 per cent. of spirit of ammonia and a little camphor and perfume oils are added.—Mfr.: L. Stottmeister, Leipzig R, Germany.

MIGROL is said to consist of equal parts of sodium-pyrocatechin acetate (guaiacetin) and caffeine-pyrocatechin acetate. It is prescribed in migraine, headache, and the like. Dose, 8 grains once to three times daily.—Mfrs.: Drs. v. Gember & Pehlhaber, Weissensee, Germany; agts.: Foerst Bros., New York.

MIGROPHEN is the trade name given to a compound of lecithin and quinine. The article is but slightly bitter, and is said to be comparatively free from the by-effects of quinine. It is administered as an anodyne and febrifuge, in headache, migraine, influenza, etc. Dose, 4 to 10 grains, with milk sugar as powder, or as tablets.—Mfrs.: "Sicco," Berlin O, Germany.

MIGROSINE is a 5 per cent. solution of menthol in acetic ether, used as a liniment in migraine, etc.—Mfrs.: Hohenzollern Apotheke, Breslau, Germany.

MIKRONAL is a modified *menthol-formaldehyde*, combined with tetrapyridine carbonate. It is proposed for use by inhalation in 1 per cent. solution. See caution under formaldehyde.

MIKROSOL is a disinfectant consisting essentially of crude copper sulphate (75 per cent.) and copper sulphate (10 per cent.), and of the consistency of a paste.

MILDIOL is a mixture of creosote with mineral oils, employed as a disinfectant.

MILIGRIN is phenazon-methylacetanilide and is exploited for the treatment of headache.

MIN-ALA is an American natural, sparkling, laxative water from springs at Mineral Wells, Texas. It is said to contain in each gallon sodium sulphate 196.64 grains, sodium chloride 19.38 grains, calcium sulphate 32.3 grains, magnesium sulphate 21.77 grains, silica 8.32 grains, and carbonic acid 30 grains. Dose, a glassful three to twelve times daily. *Min-ala tablet split* is an effervescent tablet made from the salts of the water and each representing a tumblerful of the water. The *salts* are also marketed, as well as a *tooth-paste*, *salve*, and *soap*.—Marketed by Standard Mineral Water Co., Mineral Wells, Texas, and New York.

MIOL is "a vegetable product suitable as a summer food and restorative. Its salient points are the pure vegetable oil and organically combined iodine and phosphorus." Also exploited as a bronchitis remedy.—Mfrs.: Miel Mfg. Co., London SE, Eng.

MIRACOLO is a cancer remedy consisting essentially of a 16 per cent. solution of formaldehyde in diluted alcohol. See caution under formaldehyde.

MIRMOL is an antiseptic used in cancerous and other ulcers, consisting in the main of a 0.3 per cent. solution of carboic acid in formalin (formaldehyde solution). See caution under *formaldehyde*.—Mfr.: Dr. A. Ranelletti, Rome, Italy.

MITIN is a white, smooth, easily trituated ointment base; "a superfatted emulsion with a high content (50 per cent.) of serum-like fluid." It is marketed in various forms and combinations.—Mfrs.: Krewel & Co., Cologne, Germany; agts.: Lehn & Fink, New York.

MOLLIN (*sapo unguinosus*) is a superfatted potash soap made from cocoanut oil and admixed with glycerin. It was introduced some years ago as an ointment base, but it is seldom called for now-a-days on this continent.—Mfr.: A. Canz, Germany; agts.: Merck & Co., New York.

MOLLISIN or *mollosin* is an ointment base obtained by melting 1 part of yellow wax in 4 parts of liquid paraffin.

MONOACETYL-PYROGALLOL is a synonym of *eugallol*.

MONOBENZOYL-ARBUTIN.—See *cellotropin*.

MONOBROM-ACETANILID is a synonym of *asepsin*.

MONOBROM-ANTIPYRIN is described under the title *bromopyrin*.

MONOBROM-ETHANE is *ethyl bromide*.

MONOBROM-ISOVALERIANYL-UREA. See *bromural*.

MONOBROM-PHENOL, ORTHO-, also known as *bromophenol* and *monobromated phenol*, $C_6H_4Br.OH$, is a reddish-yellow, oily liquid of strong odor, soluble in 100 parts of water and in ether or chloroform, and used in 1 to 2 per cent. ointments in erysipelas, wounds, etc.—(Nonproprietary.)

MONOCHLORAL-ANTIPYRIN.—See *hypnal*.

MONOCHLORPHENOL, PARA.—See *parachlorphenol*.

MONOCHLOR-ETHANE is a chemical designation for the substance more commonly known as *ethyl chloride*.

MONOCITRYL-PARAPHENETIDIN.—See *apolysin*.

MONOIODO-DIBISMUTH-METHYLENE DICRESOTINATE is known in the trade as *biodal*; which see.

MONO-IODO-DIOXYBENZENE-FORMALDEHYDE. See *iodofan*.

MONOL is a French trade name for *calcium permanganate*.

MONOPHENETIDIN CITRATE is a synonym of *apolysin*.

MONOSALICYLIC ACID GLYCERIN ESTER or ETHER is referred to under its trade name, *glycosal*.

MONOTAL is the methylglycolic acid ester of gualacol, or *guaiacyl methylglycolate*, $C_{10}H_{12}O_4$. It occurs as a limpid, colorless oil, of faintly aromatic odor and specific

gravity of 1.17 to 1.18. It is soluble in about 6 parts of olive oil, readily soluble in alcohol, ether or chloroform, and practically insoluble in water. It is used by inunction as an antipyretic and anodyne, 30 to 60 minims being rubbed in or painted on once or twice daily.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

MONOTAL TABLETS are employed as an anodyne in neuralgia, gout, etc.

MORBICIDE is a brown, thick liquid, representing a potash-resin soap with about 12 per cent. of formaldehyde. *Morbicide G*, intended for gynecological use, contains besides resin soap also oil soap, together with 12 per cent. of formaldehyde. Both products are disinfectants and deodorants.—Mfrs.: Schülke & Mayer, Hamburg, Germany; agts.: Lehn & Fink, New York.

MORISICCOL is a dry preparation of cod liver oil, containing 36.6 per cent. of oil and 21 per cent. of mineral matter, among the latter being hypophosphites.

MORPHACETIN is an English name for *diacetylmorphine* (*heroin*.)

MORPHINE-BISMUTH IODIDE is a soluble salt of bismuth iodide and morphine hydroiodate, recommended by A. Robin as an analgesic dusting-powder for wounds. As much of it is added to cinchonidine-bismuth iodide (erythrol) as will make about 0.025 gram of morphine per application.

MORPHINE BROMETHYLATE is a new morphine salt of the formula $C_{17}H_{19}NO_4Br + H_2O$. It occurs as white, glistening needles containing 21 per cent. of bromine, and soluble in about 20 parts of water, slightly soluble in alcohol and nearly insoluble in chloroform or ether. It is recommended as less toxic than the ordinary morphine salts.—Mfrs.: J. D. Riedel Co., Berlin and New York.

MORPHINE DIACETIC ESTER.—See *diacetylmorphine*.

MORPHINE METHYLBROMIDE.—See *morphosan*.

MORPHOSAN is *morphine bromo-methylate* or *morphine methylbromide*. It forms white crystals, difficultly soluble in cold water, but easily soluble in hot water. It acts like morphine hydrochloride but is weaker. It easily crystallizes out from aqueous solutions. The solutions turn brown on sterilizing.—Mfrs.: J. D. Riedel Co., Berlin and New York.

MORRHUAL (not *morrhual*) is a cod liver oil emulsion containing 0.5 per cent. of iodine (in the form of iodipin) and the hypophosphites of calcium and sodium.—Mfr.: Dr. A. Brüggemann, Beverungen, Germany.

MORRHUINE, $C_{27}H_{45}N_3$, is one of the alkaloids found in cod liver oil; a thick oil, soluble in alcohol or ether. It has been used as a digestive. Dose, 15 grains per day; children up to 8 grains daily.—(Nonproprietary.)

MORRHUOL is the analogue of *gadul* and other brands of the extractive of cod liver oil, 1 part representing 25 of oil. It is marketed only in 0.2 gram capsules, 1 to 3 of which are given in place of cod liver oil thrice daily.—Marketed by E. Fougera & Co., New York.

MUCIN is the mucous substance (glycoproteid) of bile, probably consisting, as marketed, of a mixture of serum globulin, true mucin, and bile salts. It occurs as a yellow to greenish-gray powder, soluble in water. It is used internally in gastric ulcer, and topically (in 1 per cent. solution in equal parts of lime water and sterilized water, with 1 per cent. of sodium bicarbonate and $\frac{1}{2}$ per cent. of menthol) as a spray in rhinitis and pharyngitis, and as an injection near the site of cancers. Dose, 10 grains with 10 grains of sodium bicarbonate at the beginning of meals.—Mfr.: E. Merck, Darmstadt, Germany.

MUCOFERRIN is an iron preparation prepared by Carrozzani "from the mucin and mucoid substances of snails and the vitreous humor of freshly killed oxen." It occurs as a powder that is soluble in acid and alkaline liquids.

MUCOGEN is defined as a chlorine compound of dimethyl-phenyl-para-ammonium-beta-oxynaphtoxyamine. dimethyl-phenyl-para-ammonium-beta-oxynapht-oxyamine. It occurs as blue crystals, soluble in alcohol and alkaline solutions, and almost insoluble in water. It is put forward as a cathartic. Dose, $1\frac{1}{2}$ to 5 grains.

MUCOL is described as a 1:30 solution of salicylic acid in alcohol and glycerin with a little menthol, and is used as a paint in infectious mouth and throat diseases.—Mfr.: Dr. A. Müller & Cie, Lebnitz, Germany.

MUCUSAN is described as "*diboron-zinc tetraorthoxybenzoate*" [ortho-oxybenzoic acid is salicylic acid.—Ed.] and as having the formula $(C_6H_4COO.O.C_6H_4COOH.O.BO-H).Zn$. It occurs as a light, white, odorless powder soluble in water and in alcohol. It is intended for use as an antiseptic and astringent in gonorrhea, leucorrhoea, rhinitis, etc., applied in $\frac{1}{4}$ to 1 per cent. solutions.—Marketed also as 15-grain tablets.—Mfrs.: Fabrik pharmaceutischer Präparate, Frankfurt-on-M., Germany.

MUEGLITZOL is a liquid remedy for perspiring feet, the active constituent of which is said to be a formaldehyde-evolving compound of formaldehyde and ichthyol. See caution under *formaldehyde*.—Mfrs.: Chem. Werke "Mügeln," Mügeln, Germany.

MUIRACITHIN is a combination of inspissated fluid extract of *muira puama* and lecithin. It is used chiefly in sexual neurasthenia and nervous impotence. Marketed in silver-coated dragees.—Mfrs.: Noris, Zahn & Co., Berlin C, Germany; agts.: L. M. Cassett, Philadelphia, Pa.

MULTITOXINE is a mixture of tubercle alexines (10), formaldehyde (1), and water (19), used in tuberculosis—

1.5 c.c. hypodermically at a dose.—Mfrs.: Aulde Chem. Co., Philadelphia, Pa.

MUSARINA is flour obtained from unripe bananas, and used as a nutrient in gastro-intestinal diseases.

MUSCULON.—See under tannin-organotherapeutic preparations.—Mfrs.: Chem. Fabrik "Rhenania," Aix-la-Chapelle, Germany.

MUSCULOSE is raw muscle juice recommended in tuberculosis.—Mfrs.: Chaise & Co., Paris, France.

MUSIN was originally a tamarind jam, used as a laxative. This product is no longer made. Musin now consists of 55 per cent. of castor oil and 45 per cent. of a mixture of levulose, albumin, egg yolk, and sugar. It is employed as a laxative.—Mfr.: J. E. Stroschein, Berlin, Germany; agts.: Fischer Chem. Importing Co., New York.

MUSOL is a diabetes remedy reported to consist simply of salol put up in 1 gram cachets.—Mfr.: S. Rahmer, Cassel, Germany.

MUSTEROLE is a local irritant and epispastic, the active constituent of which is said to be mustard oil.—Mfrs.: Musterole Chem. Co., Cleveland, O.

MUTASE is a nutritive prepared from legumins and vegetables; a yellowish, odorless powder of spicy taste, and containing 58 per cent. of vegetable albumin and 2 per cent. of phosphoric acid. Dose, a small teaspoonful several times a day, pure or stirred into bouillon, milk, etc., and allowed to boil up and drunk when sufficiently cooled.—Mfrs.: Chem. Fabrik vorm. Weiler-ter-Meer, Nerdlingen, Germany.

MYCODERMINE is a Parisian yeast extract employed in boils, etc., like beer yeast and its various preparations on the market (levuretin, cerevisine, zymin, etc.). Marketed as tablets and pills, four of the latter equalling a tablespoonful (the ordinary dose) of natural beer yeast.—Mfr.: E. Déjardin, Paris, France.

MYDRINE is a combination of ephedrine and homatropine hydrochlorides (100:1), occurring as a white powder soluble in water, and employed in 10 per cent. solution as a mydriatic of transient effect.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

MYDROL (*iodo-methyl-phenyl-pyrazolon*) is a white powder readily soluble in water. It has been recommended as a mydratic, in 5 to 10 per cent. solution.

MYELENÉ is a thick, red, liquid preparation of bone marrow, used in scrofula, rickets, etc.—Mfr.: Dr. R. Schultze, Herdicke, Germany.

MYELOCENE is an ethereal extract of bone marrow, in vogue in England, 10 drops of which are instilled warm in deafness and other ear troubles.

MYOGEN is an albumin preparation obtained from the blood serum of freshly killed cattle; a fine, odorless,

brownish-gray powder, tasting somewhat like glue, insoluble but swelling considerably in water, and containing 83.25 per cent. of animal albumin. It was introduced by Dr. Plönnis as a readily assimilated nutrient. Marketed also as biscuits containing about 25 per cent. of albumin.—Mfr.: Internationale Heil- und Nahrungsmittel Co., Leipsic, Germany.

MYRISTINA is a new vegetable fat, derived from the seed of *myristica sebifera*. It tastes and smells like cacao butter, melts at 37° C., and is soluble in alcohol, ether, chloroform or turpentine oil. It is intended for use as an ointment base, as well as a nutrient.

MYRONIN is an ointment base prepared from wax, stearin, potash, and oil, and containing about 12 per cent. of water.—Mfrs.: Eggert & Häckel, Berlin, Germany.

MYRRHOLIN is a solution of myrrh in castor oil, used as an application to wounds.—Mfrs.: Myrrholin Co., Frankfurt-on-M., Germany.

MYRTILLIN is the name applied to Prof. Winternitz's extract of huckleberry, which is used chiefly as a paint in skin diseases.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

MYRTOL is the fraction of essential oil of myrtle which distills between 160 and 180° C.; a clear, colorless liquid, of pleasant odor, and soluble in alcohol. It is employed internally in chronic bronchitis, tonsillitis, cystitis, etc., and externally in parasitic skin diseases. Dose, 1 to 5 minims several times a day, in capsules or on sugar.—(Nonproprietary.)

N

NAFALAN is a recent analogue of naftalan (described below), having the same properties and action as the latter. It is marketed also as domestic nafalan (with zinc oxide), as adhesive plaster, hemorrhoidal cones, soaps, and cream.—Mfrs.: Nafalan Co., Magdeburg, Germany.

NAFTALAN (*naphtalan*) obtained from the distillation of naphtha free from resin and asphalt, derived from Naftalan in the Caucasus. It occurs as a blackish-green, ointment-like mass of empyreumatic odor, soluble in ether and chloroform, miscible with fats, and insoluble in water and alcohol. It is used in skin diseases—as 5 per cent. emulsion or ointment, 2 to 3 solution in olive oil, etc. Its stains on the linen may be removed with benzine.—Marketed by Fort Wayne Drug Co., Fort Wayne, Ind.

NALICIN is described as a liquid containing 1 per cent. of nitroglycerin, 1 per cent. of cocaine hydrochloride, "compound spirit of thymol," sodium chloride, formaldehyde, carbonic acid and distilled water. It is intended for

use as a local anesthetic in dentistry. See caution under *formaldehyde*.—Mfr.: Adolf Kirch, Wiesdorf, Germany.

NAPHTA SAPONATA is the name given by P. Hentschel, Zwönitz, Germany, to a naftalan substitute.

NAPHTASAPOL is another product claimed to be the same as *naftalan*.

NAPHTALOL and NAPHTOSALOL are synonyms of *betol*.

NAPHTHAMINE is an English trade name for *hexamethylenetetramine*; a formaldehyde compound official in this country under the name *hexamethylenamine*. See caution under *formaldehyde*.

NAPHTHOLXOL is a 3 per cent. solution of hydrogen dioxide containing 2 per cent. of betanaphthol and some alcohol. It is used as an antiseptic and antiparasitic.—Mfrs.: C. Raspe, Weissensee, near Berlin; agts.: C. Bischoff & Co., New York.

NAPHTOFORMIN is a condensation product of hexamethylenetetramine (*formin*, etc.) and naphtol; a white, crystalline substance soluble in water or alcohol, insoluble in ether or oils. It is employed in dermatology. Its solutions should be prepared with *cold* solvents. See caution under *formaldehyde*.—Mfr.: Dr. G. F. Henning, Berlin SW, Germany.

NAPHTOL, ALPHA, $C_{10}H_7OH$, is an isomer of the official (beta-) naphtol, occurring as colorless or pinkish prisms or powder, of pungent, irritating odor and taste, soluble in alcohol and ether, almost insoluble in water. It is used chiefly as an intestinal antiseptic and antifermentative, 5 to 15 grains in wafers or castor oil; to a small extent also externally in erysipelas, smallpox, etc., in 10 to 20 per cent. oily solutions.

NAPHTOL ARISTOL.—See *diiodo-beta-naphtol*.

NAPHTOL BENZOATE is described under *benzonaphtol*.

NAPHTOL BISMUTH is referred to under its trade name, *orphol*.

NAPHTOL, CAMPHORATED, (*naphtol-camphor*; *naphtylated camphor*), is obtained by heating a mixture of 2 parts of camphor and 1 of beta-naphtol until it melts. It forms a thick liquid soluble in alcohol. It is used as an antiseptic—with cocaine as a paint on tuberculosis processes, diluted with oil in coryza, scabies, etc. It should be protected against light.—(Nonproprietary.)

NAPHTOL-CHARCOAL is wood charcoal admixed with beta-naphtol and used abroad as an intestinal disinfectant. Dose, a small teaspoonful several times a day.

NAPHTOL-EUCALYPTOL.—See *eunol*.

NAPHTOL SALICYLATE (*naphtol salol*).—See *betol* and *alphol*.

NARCEINE-SODIUM SALICYLATE.—See *antispasmin*.

NARCOFORM is the same as *somnoform*, which see.

NARCOTILE is an anesthetic obtained by the action of hydrochloric acid upon ethyl and methyl alcohol, intended especially for use in dental practice.

NARCOTINE (*anarcotine*; *opian*; *narcosine*) is an alkaloid of opium formerly believed to be possessed of narcotic properties but more recently proved to be rather without such action and hence renamed *anarcotine*. It is prescribed in malaria and migraine, chiefly as its hydrochloride. Dose, $1\frac{1}{2}$ to 4 grains.—(Nonproprietary.)

NARCYL is a French trade name for *ethylnarceine hydrochloride*, which see.

NARENTA WATER is claimed to be an American spring water, "a medicinal water, a laxative water." The analysis shows it to contain the ingredients commonly found in natural laxative mineral waters, including sulphides. Dose, two tablespoonfuls with water, before breakfast.—Narenta Mineral Springs Co., East Aurora, N. Y.

NARGOL (*nuclein-silver*; *silver nucleinate* or *nucleide*) is a combination of silver with yeast nuclein, occurring as a brownish-white powder readily soluble in water and containing about 10 per cent. of silver. It solutions are not precipitated by dilute organic acids, sodium chloride, alkalies or albumin, but by dilute inorganic acids. It is used in $\frac{1}{2}$ to 20 per cent. solutions, in eye diseases, gonorrhea, etc. its solutions should be dispensed in a dark amber bottle.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

NARKINE is described as "an opium preparation from which all deleterious qualities have been eliminated, a nervine and hypnotic. Absolutely free from coal-tar or opium derivatives."—Mfrs.: Tilden Co., New Lebanon, N. Y.

NARCOGEN is a mixture containing chloral hydrate, potassium bromide, hyoscine hydrobromide and narkine. It acts as a nerve sedative and hypnotic.

NASAN is absorbent cotton impregnated with formaldehyde solution. See caution under formaldehyde.

NASOL is a liquid coryza remedy consisting of citric acid, menthol ester, glycerin, alcohol and water.—Mfr.: Dr. E. Krause, Leipsic, Germany.

NASTIN is the crystalline fatty substance of lepra bacilli, isolated by Deycke and Reschad in 1907. It is intended as an immunizing agent as well as remedy for leprosy. *Nastin B I* is standard strength; *Nastin B II* is concentrated strength; and *Nastin B O* is weakest strength and specially indicated in anesthetic cases. The article is sold in injections ready for use, six 1 c.c. tubes to a box. Mfrs.: Kalle & Co., Biebrich, Germany; agts.: Lehn & Fink, New York.

NATRO-PHEN is a white, odorless, sweet powder, moderately soluble in cold water, and containing apparently sodium salicylate and acetanilid (phenylacetamide). It is prescribed as an antipyretic and anodyne. Dose, 3 to 10 grains, in capsules or powder.—Mfrs.: Natro-phen Chem. Co., New Albany, Ind.

NEBULATES are fluids that are intended to be atomized by air pressure in a special apparatus and inhaled in different affections of the throat and respiratory tract. Fifteen different combinations are marketed, named, respectively, mezi, mekamco, pijokreo, lotan, chilbromanco, meniocar, mezico, pizikreo, iodcartan, aldesar, chlorbromeco, chloriokreo, euterpen, chloreusar, latschenöl (German=ol. pini pumilionis).—Mfrs.: Einhorn Apotheke, Berlin C, Germany.

NECTRIANINE is a culture of *nectria ditissima*, a parasitic growth found on trees; used by Bra and Mongour as a remedy in cancer.

NEO-ARSYCODILE is one of the various trade names for *disodium methylarsenate*, which see.—Mfr.: Dr. M. Le Prince, Paris, France; agts.: E. Fougere & Co., New York.

NEOCHININ is defined as a neutral hydrochloride of cinnamyl-quinine, occurring as tasteless, white crystals and employed as an antiperiodic. Dose, 15 to 20 grains. (Not to be confounded with another neoquinine, quinine glycerophosphate.)

NEOCITHIN (*neocitin*) is an iron, albumin and lecithin preparation exploited as a nervine by Neocithin Co., Berlin SW, Germany.

NEODERMIN is an ointment containing 85 per cent. of lanolin, 10 per cent. of petrolatum, 4 per cent. of difluordiphenyl, and 1 per cent. of fluorpseudocumol, and having a decided aromatic odor. It is used in burns and various other skin lesions, pure.—Marketed by C. Bischoff & Co., New York.

NEOFERROL is "a liquid lecithin-iron-manganese saccharate;" a hematonic and nerve. Dose, a teaspoonful to a tablespoonful, according to age.—Mfr.: J. Fritz Neuhäus, Ottweiler, Germany.

NEOFORM is *bismuth oxytriiodophenate*, $C_6H_5IO_3BiO$. It occurs as a yellow powder, of a faint odor reminding one of xeroform (basic bismuth tribromphenate), and insoluble in the ordinary solvents. It is permanent in light and a moist atmosphere. According to Dr. Pitini, neoform is an excellent application to ulcers, particularly those of tubercular nature; it absorbs and rapidly diminishes the abnormal secretions, stimulates granulation, and acts as an antiseptic by gradually liberating iodine.

NEO-PYRENOL is said to be prepared by the following process: Thymol is made water-soluble by p-dioxybenzene, and into this solution benzoic acid (Siam) is incorporated.

Four parts of this product are added to equal parts of sodium benzoate and sodium oxybenzoate. It is said to act as a sedative, antirheumatic and antipyretic.—Mfrs.: Goedicke & Co., Leipsic, Germany; agts.: Schering & Glatz, New York.

NEOPYRINE is *valerylamidoantipyrine*, and occurs as white, odorless, bitter crystals that are but slightly soluble in water, readily soluble in alcohol or chloroform. It is used as a nerve sedative and antispasmodic. Dose, 5 to 10 grains. A *bromneopyrine*, containing 21.85 per cent. of bromine and used especially as a nerve sedative, is also marketed.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

NEO-SACCHARIN is a trade name for *saccharin*.

NEOSIODE is what Chevreton calls a compound of iodine and catechin, *iodocatechin*, prepared by him and intended as a substitute for the alkali iodides in cases where the latter are not well borne. The substance is prepared by prolonged heating of an aqueous or alcoholic solution of catechin, and adding iodine little by little. On cooling, an amorphous, yellow powder deposits, which is sparingly soluble in cold water, more readily soluble in hot water, freely soluble in alcohol.

NEOTTINUM is a new nutritive containing lecithin and albumin.—Mfrs.: Fritz-Petzoldt & Süss, Vienna, Austria.

NEPENTHE is "a compound of blackberry root, nutgalls, cinnamon, ginger, prickly ash bark and aromatic carminatives." It is used as an intestinal astringent and antizymotic. Dose, $\frac{1}{2}$ teaspoonful.—Mfrs.: Tilden Co., New Lebanon, N. Y.

NEPHRITICA is "a combination of juniper, buchu, uva ursi, liverwort, lithia, bromide and acetate of potassium, with $\frac{1}{2}$ grain of hyoscyamus to the dram." Exploited as a kidney and bladder remedy. Dose, 1 to 2 teaspoonfuls.—Mfrs.: Tilden Co., New Lebanon, N. Y.

NEPHRITIN is described as "the primary substances of the cells of the cortex and convoluted tubules of the kidney." It is intended for employment in Bright's disease and other disturbances of the kidneys. It is marketed only as 5-grain capsules.—Mfrs.: Reed & Carnrick, Jersey City, N. J.

NEPHROSON is a diuretic elixir of sourwood, wild hydrangea, eupatorium, hair cap moss, water eryngo, corn silk, all green drugs, with tincture of bees, lithium benzoate and juniper spirit. Dose, a teaspoonful every 1 to 3 hours.—Mfrs.: Wm. S. Merrell Chem. Co., Cincinnati, O.

NERCIBUS is a syrup of glycerinophosphates prepared by the Organic Chem. Co., Philadelphia, Pa.

NERVAN consists of pyramidon and caffeine citrate.

NERVITONE is a nerve tonic containing the active constituents of cinchona and cola with calcium glycerinophos-

phate and iron, made by M. J. Schultze, Dresden, Germany. Later the same name was given a syrup containing organic iron, bromine, lime salts and sodium glycerophosphates.—Mfrs.: Apotheke zum heiligen Stephan, Budapest, Hungary.

NERVOCIDINE is the name applied to the hydrochloride of an alkaloid derived from gasu-basu, an Indian plant. The article occurs as a yellow, hygroscopic powder, readily soluble in water, and sparingly soluble in alcohol or ether. It is used chiefly as a dental local anesthetic, in 0.1 per cent solution, but also on the eye, in 0.01 per cent strength.—Marketed by S. S. White Dental Co., Philadelphia and New York.

NERVOL is a compound of effervescent sodium-vanadium citro-chloride (citrozone) and lithium bromide (10 per cent.). It is prescribed as a nerve sedative and tonic. Dose, a teaspoonful.—Mfrs.: "Pharmaco," Lippspringe, Germany.

NERVOSIN PILLS consist, according to Gutt, of alcoholic extract of valerian, alcoholic extract of angelica, aqueous extract of chenopodium, and oils of valerian, angelica and bitter orange. They are prescribed as a nerve-sedative, chiefly in hysteria.

NESAIN is an arsenic-proteid compound, used subcutaneously as an alternative like atoxyl.—Mfr.: Dr. L. Oestreicher, Berlin, Germany.

NEURACETIN is an English antipyretic and analgesic, marketed as powder and 5-grain tablets. Dose, 5 to 15 grains.

NEURALGIN is said to represent a mixture of acetanilide, caffeine and sodium salicylate.

NEURALTHEIN is the fanciful name given to the sodium salt of para-ethoxyphenylamido-metasulphonic acid, of the formula $C_6H_4(OC_2H_5).NH.CH_2SO_3Na + H_2O$. It is said to be an antipyretic and antineuralgic. It is soluble in water but insoluble in alcohol.

NEURASIN TABLETS are said to consist of bromides, valerian, quinine, salipyrine and guarana, and are intended as a substitute for migrainin as an analgesic and sedative.—Mfr.: Edw. Bamann, Lindenberg, Germany.

NEUREMIN is a hematinic and nervine the preparation of which is described as follows: 20 grams of lecithin are dissolved in 100 grams of ether, and a solution of 10 grams each of hematin and smilacin in 2 liters of 90 per cent. alcohol is gradually added, shaking well after each addition. The mixture is then evaporated at 30° C. and dried on plates. The product occurs as a soft, wax-like, brownish-red mass, that is soluble in alcohol or ether, and melts at 128° C.—Mfrs.: Gablin & Co., Paris, France.

NEURENE BRISSONET, exploited as a "nerve tonic," contains borneol.

NEUROCAINE is the name applied to billets of cocaine hydrochloride $\frac{1}{2}$ grain without excipient.—Mfrs.: Schiefelin & Co., New York.

NEURODIN is the trade name for *acetyl-para-oxyphehyl-urethane*, $C_6H_4(OCO.CH_3).NH.CO.OC_6H_5$, which chemical appears as colorless, odorless crystals, slightly soluble in water. It is used as an antineuralgic and antipyretic. Dose, 5 to 25 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

NEURODINIA is an elixir of veronal (diethylmalonylurea), containing 2 grains of the drug in each dram in a menstruum containing 35 per cent. of alcohol with aromatics. It is used as a hypnotic in all forms of insomnia save those caused by severe pains. Dose, 2 to 4 drams. Sometimes administered per rectum, in double the dose by the mouth.—Mfrs.: Schieffelin & Co., New York.

NEUROFEBRIN is an analgesic said to be composed of neuronal and acetanilide and marketed in 0.5 grain tablets.—Mfrs.: Kalle & Co., Biebrich, Germany; agts.: Lehn & Fink, New York.

NEUROGEN is a bath salt said to consist of 73 per cent. chlorides, 25 per cent. sulphates, and 2 per cent. of a compound of ferrous oxide and glycerin.—Mfr.: Dr. Alwin Müller, Leipsic, Germany.

NEUROL or *neuron* is a nutritive consisting according to reports of 3 per cent. of hypophosphites, 17 per cent. of peroxides, 5 per cent. of iron compounds, and 75 per cent. of carbohydrates and nitrogenous principles. It is employed in nervous debility, rickets and scrofula. Dose, 4 to 6 teaspoonfuls per day.—Mfr.: G. Weiss, Hanover, Germany.

NEURO-LECITHIN is *lecithin* derived from fresh brain and spinal cord, marketed as tablets containing $\frac{1}{2}$ grain of the drug with small amounts of fats and cholesterin. It is identical in action and uses with the regular lecithin obtained from yolk of egg.—Mfrs.: Abbott Alkaloidal Co., Chicago, Ill.

NEUROLIN BALLA is a name for syrup of hypophosphites with bromides.

NEURONAL is the trade name applied to *bromdiethylacetamide*, $Br(C_2H_5)_2.C.CO.NH_2$, a white, crystalline powder of a camphoraceous odor and bitter, pungent, cooling taste; readily soluble in alcohol, ether or chloroform, and dissolving in about 120 parts of water at ordinary temperature. It is used as a hypnotic. Dose, 8 to 30 grains.—Mfrs.: Kalle & Co., Biebrich, Germany; agts.: Lehn & Fink, New York.

NEUROSEDAT is said to contain extract of *cannabis indica*, extract of *hyoscyamus*, codeine, and potassium, sodium and ammonium bromides.

NEUROSEDATE is a mixture said to contain bromides, codeine, hyoscyne, valerian and gentian and is employed as a nervine.

NEUROGIN is the name applied by two manufacturers to different products. The one is a tablet containing caffeine and nitroglycerin, and used in cardiac neuroses, headaches and the like; *neurogin* Frasier (Paris, France) is a syrup, granules, and cachets of calcium glycerophosphate.

NEUROTONE is defined as "*hypero-nuclein salicylate*," and is exploited as a general tonic.—Mfr.: Dr. H. Müller & Co., Berlin C, Germany. Another *neurotone* is an elixir of glycerophosphates of calcium and sodium. *Neurotone* capsules contain 5 grains of the combined salts, with 1/64 grain of strychnine nitrate. Marketed also in *ferro-arsenated* form in capsules.—Mfr.: Haas Pharmacy, New York.

NEUROTONIC ESSENCE is said to contain calcium glycerophosphate, iron and manganese peptonate, quinine lactate, valeric acid and menthyl ester, hydrobromic acid glyceryl ester, extract of *nux vomica* and malaga wine. It is a general tonic.—Mfr.: Dr. E. Bloch, Basle.

NEUROTROPIN is an abbreviated appellation for the German "*neu-urotropin*" (*new urotropin*).

NEUTRALON is an aluminum silicate brought forward for the treatment of diseases of the stomach. It readily absorbs hydrochloric acid, forming silicic acid and aluminum chloride. It is used as a gastric sedative. Dose, a teaspoonful.—Mfr.: Dr. C. A. F. Kahlbaum, Berlin C, Germany.

NEUTRAL RED OINTMENT is prepared, according to Friedberger and Yamamoto, by adding a solution of 0.1 gram of neutral red in absolute alcohol to 100 grams of petrolatum. It is recommended for experiments in the treatment of small-pox.

NEUTROS SAPON is a new neutral soap recommended as a soap and ointment base. It is said to take up solutions of medicaments quite freely, not to irritate the skin and to be especially adapted for the preparation of eye salves.

NEW SIDONAL.—See under *sidonal*.

NEW UROTROPIN is a brand name for *hexamethylenetetramine methylene citrate*, described under *helmitol*.

NICKEL BROMIDE, NiBr_2 , was brought to the fore a few years ago as a nerve sedative, chiefly in epilepsy. It occurs as a greenish-yellow deliquescent powder, soluble in water, alcohol or ether. Dose, 2 to 8 grains in solution. Maximum daily dose, 24 grains.—(Nonproprietary.)

NICKEL SULPHATE, green crystals of sweet, as tritngent taste and soluble in 3 parts of water, has also

come somewhat into vogue latterly as a remedy in malarial migraine. Dose, $\frac{1}{2}$ to 1 grain three times daily.—(Nonproprietary.)

NICOLICIN was a complex galenical preparation brought forward a few years ago as a remedy for morphomania, but found on analysis to contain morphine, and hence since abandoned by the medical profession.—Mfr.: Oscar Nicolai, Jüchen, Germany.

NICOTINE SALICYLATE.—See *eudermol*

NIERALINE is a French brand of the active constituent of the suprarenal capsule.—See *epinephrine*.

NIRVANIN is the hydrochloride of *diethyl-glycocoll-para-amido-ortho-oxybenzoic acid methyl ester*, a white powder, of bitter, metallic taste, and readily soluble in water (1 in 5) or alcohol; brought forward as a substitute for cocaine as a local anesthetic, and claimed to be less toxic. Dose, 2 to 5 grains.—Mfrs.: Meister, Lucius & Brüning, Hoechst, Germany; agts.: V. Koechl & Co., New York.

NITROX is described as "an antiseptic which is non-poisonous and nonirritant, and which does not coagulate the albumin of the tissues."—Mfrs.: Nitrox Chem. Co., St. Louis, Mo.

NITYLIN, according to the manufacturers, consists of decoction of anise, containing tannin, boric acid, glycerin, ichthyol, sozodole-zinc, and oil of gaultheria. It is exploited as an application in leucorrhea.—Mfr.: F. Nitykowski, Solingen, Germany.

NIVEA is a basic soap, intended for combination with various medicaments.

NIZIN is the trade name applied to *zinc sulphanilate*, $\text{Zn}(\text{C}_6\text{H}_4\text{O}_2\text{NS})_2 \cdot 4\text{H}_2\text{O}$. The product occurs as small white crystals soluble in water, and is recommended as an antiseptic astringent in inflammatory conditions of the mucous membranes, particularly gonorrhea. It is used in solutions containing 2 to 6 grains per fluidounce. Marketed as 2-grain tablets.—Mfrs.: Burroughs, Wellcome & Co., London and New York.

NIZO-LYSOL is lysol with an improved odor (pleasant, aromatic), and hence specially adapted for disinfecting the hands and the sick-room. Its physical properties are otherwise the same as those of lysol, and it is prepared according to the same process and contains the same proportions of cresols, but further purified.—Mfrs.: Schülke & Mayr, Hamburg, Germany; agts.: Lehn & Fink, New York.

NODUSAN is defined as *dithymol-iodo-metadioxy-benzene-bismuth*, and is used in suppositories in hemorrhoids.

NOITOL is an eczema lotion which the laboratory of the American Medical Association reported to be "a weak acid solution of mercury salts . . . approximately equiva-

lent to a 1 to 1000 methiodide of mercury solution."—Mfrs.: Wheeler Chem. Co., Chicago, Ill.

MORI is a nutrient prepared from sea algae.

MORHALL SUPPOSITORIES, which are advertised for the treatment of bleeding hemorrhoids, are said to contain calcium chloride 0.05 gram, calcium iodide 0.02 gram, paracetophen 0.0001 gram, and para balsam 0.1 gram.—Mfrs.: Moris, Talm & Co., Berlin C. Germany.

MORALEX is an alternative tonic containing "hemoglobin and serum albuminate of arsenic" and used in skin diseases and various diatheses.—Mfrs.: Chapman Mfg. Co., Chicago, Ill.

MOROL (not used) is not a new remedy but a dental antiseptic and anodyne consisting of eugenol (4), clove oil (4), eucalyptus oil (4), wintergreen oil (1), cinnamon oil (1), and thymol (1).

MOSOPHEN, formerly known as *iodophen*, is chemically tetraiodo-phenolphthalein, $C_{20}H_2O_4I_4$, resulting from the action of iodine upon phenolphthalein. It occurs as a brownish-yellow, nearly odorless, tasteless powder, containing 60 per cent. of iodine, soluble in ether or chloroform, insoluble in water, and sparingly soluble in alcohol. It is used chiefly as a surgical antiseptic in place of iodiform, but to some extent also as an intestinal antiseptic. Dose, 4 to 10 grains.—Mfrs.: Chem. Fabrik "Echemaria," Alsch-Chapelle, Germany; agts.: Merck & Co., New York.

MOSOPHEN-BISMUTH.—See *cinchon*.

MOSOPHEN-MERCURY.—See *agallagin*.

MOSOPHEN-SODIUM.—See *cinchon*.

NOVARGAN is an organic silver-albumin compound (silver proteinate) containing 10 per cent. of silver. It occurs as a fine, yellow powder, readily soluble in water to form neutral solutions. Novargan is an astringent and bactericide, used in the treatment of gonorrhea, ophthalmia, etc., in 2 to 15 per cent. solutions.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

NOVASPIRIN is defined as *methylmethylethylsalicylic acid*, of the formula $C_{12}H_{14}O_4$. It occurs as a white, odorless powder, of acidulous taste, easily soluble in alcohol, but almost insoluble in water. It contains 62 per cent. of salicylic acid. It is intended as a substitute for the salicylates in rheumatism, pleurisy, migraine, grippe, etc. (See caution regarding methylene compounds under formaldehyde.) Dose, 15 grains several times daily.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

NOVOCAINE is a new local anesthetic discovered by Einhorn and introduced into the materia medica by H. Braun. It is *para-aminobenzoylethylaminomethanol hydrochloride*, and crystallizes in fine, colorless needles that melt at 156° C., and are soluble in 1 part of water and

about 30 parts of alcohol. Its solutions are neutral. Its aqueous solutions may be boiled without undergoing decomposition. Towards alkalies and alkaloidal reagents it behaves like alkaloidal salts. Injected subcutaneously it manifests a strong but transient anesthetic action. On the other hand, it is said to be perfectly non-irritating. To enhance its anesthetic properties, combining it with the active principle of the suprarenal capsule is recommended by Dr. Braun, who says it then acts as powerfully as cocaine. He employs solutions containing 0.25 gram of novocaine in 100 or in 50 grams of physiological salt solution, with the addition of 5 or 10 drops respectively of 1:1000 solution of suprarenine (adrenalin chloride, adnephryn, suprarenaline, etc.); or solutions containing 0.1 gram of novocaine in 10 or in 5 grams of salt solution, together with a small proportion of the solution of the vasoconstrictive principle of the suprarenal capsule. Internally it may be given in doses of 4 to 8 grains.—Mfrs.: Meister, Lucius & Brüning, Hoechst (Germany); agts.: V. Koechl & Co., New York.

NOVOCAINE NITRATE is *para-aminobenzoylethylaminoethanol nitrate*, occurring in small, colorless and odorless crystals that are soluble in water or alcohol. It is a local anesthetic that can be used with silver nitrate and other silver salts without fear of precipitation.—Mfrs.: Meister, Lucius & Brüning, Hoechst, Germany; agts.: V. Koechl & Co., New York.

NOVOLAX is a chocolate-coated tablet said to contain 2 grains of phenolphthalein, with pulp of tamarind and sugar.—Mfrs.: "Sicco," Berlin O, Germany.

NOVORENAL is the generic name adopted for solutions of various strengths of novocaine with epinephrine in physiological salt solution.—Mfr.: C. Fr. Hausmann, St. Galen, Switzerland.

NOVOZONE is a mixture of magnesium peroxide and magnesium carbonate, employed as an alternative and antizymotic, analogously to biogen. Dose, 5 to 15 grains.

NOVOZONE is a trade name adopted for *magnesium dioxide* (peroxide), MgO_2 , a white, tasteless powder insoluble in water, but readily soluble in gastric juice. The article is said to stimulate metabolism and improve nutrition, to increase the urine and augment its acidity, to stimulate peristalsis, and, finally, to favor the elimination of uric acid and toxins. Externally novozone is employed in the treatment of purulent wounds and certain skin diseases.

NUCLEATOL ROBIN contains the nucleophosphates of sodium and calcium.

NUCLEIN as in vogue in this country is nucleic acid derived from yeast, generally contaminated with some albumin and carbohydrates of the yeast cells. It occurs as a grayish-white, amorphous powder, soluble in dilute alka-

lies, slightly soluble in water, and insoluble in alcohol or ether. It acts as a germicide, and increases the white corpuscles of the blood. It is used in tuberculosis, chronic ulcers, puerperal fever, etc.—per os in capsules or solution (2 to 4 grains three times a day, between meals) or hypodermically in 5 per cent. solution in alkalized water (10 to 60 minims diluted with the same quantity of physiological salt solution freshly boiled) for which use a special, albumen-free article only is eligible. Marketed also in 2-grain capsules, and in 5 per cent. solution for oral and for subcutaneous uses. (According to Dr. Vaughan, the coal tar antipyretics and atropine are contraindicated during nuclein treatment.) Trillat has prepared nuclein compounds of mercury (see *levurargyre*), iron, manganese, vanadium, silver, arsenic, iodine, bromine, and fluorine.—(Nonproprietary.)

NUCLEIN Horbaczewski is prepared from spleen pulp, and forms a brownish-gray powder soluble in alkaline solutions, and used like nuclein from yeast.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

NUCLEOGEN is defined as an organic compound of phosphorus, arsenic and iron, the therapeutic uses of which are in chlorosis, neurasthenia, rachitis, anemia and the like. It is marketed as tablets and as a sterilized solution intended for hypodermic use.—Mfr.: Dr. Hugo Rosenberg, Berlin W, Germany.

NUCLEOL is a pure grade of nuclein; a white powder rather easily soluble in warm water.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

NUCLEOSE is an albuminous nutritive prepared from vegetable nucleo-albumins.

NURAL (*nutrol*) is a "pre-digested" starchy food for invalids; according to Beythien, essentially a starch syrup containing small quantities of hydrochloric acid.—Mfr.: Klewe & Co., Dresden, Germany.

NUTRICINE is a nutritive prepared by mixing and boiling stale bread with raw meat and forming the mass into tablets.—Mfr.: "Moride," Paris, France.

NUTRIN is a saccharated fatty albuminate derived from olive oil, of which it contains 51 per cent., and characterized as a palatable, digestible roborant and cholagogue, and substitute for cod liver oil. Mfr.: J. E. Stroschein, Germany; agts.; Fischer Chem. Importing Co., New York. (The nutritin formerly marketed, a meat-albumin preparation, has been withdrawn from the market.) Another *nutrine* (made by Fritz-Petzoldt & Süss, Vienna, is a nutritive and roborant prepared from eggs, cacao and sugar.

NUTRINUM PULVERATUM, or *nutrim powder*, is a nutritive and invigorant prepared from eggs, cacao and sugar. It is not the same as Stroschein's *nutrine*, which

is a saccharated fatty albuminate derived from olive oil.—Mfrs.: Fritz-Petzoldt & Süß, Vienna, Austria.

NUTRITIVE ROBORIN is a fine powder intended as an addition in baking. It contains 10 per cent. of roborin, 2 per cent. of eggs, wheat flour, cacao and sugar.—Mfrs.: Roborin Works, Friedrichsberg, Germany.

NUTROL.—See *nural*.

NUTROSE (*casein-sodium; sodium caseinate*) is an invalid food prepared from casein of milk with the aid of alkali; a white, coarse odorless, nearly tasteless powder, soluble in water. Dose, $\frac{1}{3}$ to $\frac{1}{2}$ ounce, in soup, milk, oatmeal, etc.—Mfrs.: Meister, Lucius & Brünig, Hoechst-on-M.; agts.: V. Koechl & Co., New York.

NYMPHAGESTIN is a bath salt with the aid of which an artificial Gastein thermal bath may be prepared, it is claimed.—Mfrs.: Nymphagestin Co., Berlin W, Germany.

NYRDAL. See *algarine*.

O

OBALGO is a dental local anesthetic of undivulged composition.

OBTUNDO is a dental local anesthetic containing chlore-tone, cocaine, nitroglycerin, thymol, menthol, and oils of eucalyptus, wintergreen and cloves.

OCULIN is a sterilized glycerin extract of the ciliary body and vitreous humor of bull's eyes, admixed with 0.6 per cent. of sodium chloride. It is used internally and subcutaneously in detachment of the retina.

ODDA is an infant food introduced by Prof. von Mehring, and prepared from whey, flour, sugar, cacao butter and yolk of eggs, the two latter in place of butter, which often gives rise to abnormal butyric fermentation in the system. The dose is 20 grams per day for each kilo of the child's weight.—Mfrs.: Deutsche Mährmittelwerke, Berlin, Germany.

ODOL is a mouth-wash extensively advertised abroad, consisting of an alcoholic solution of salol, saccharin, oil of peppermint, and traces of oils of clove and caraway.

ODOS is a substitute for meat extract, prepared from oats.

ODYLIS is obtained by heating a mixture of terpin and resorcin. It is a yellowish thin oil of an agreeable odor, and said to have antiseptic properties.

OENASE is the ferment of raisins, and is used in dyspepsia, anorexia, etc. Marketed only as 0.5 gram tablets, 2 to 6 of which are given daily.—Mfr.: Goutrurieux, Paris, France.

OIL, ARBOR, is described as a neutral product consisting of various cresols, phenols and anthracene. With an

equal volume of ether it forms a liquid reputed to be of service in certain skin diseases, rheumatism, etc. It seems to be similar to naftalan.—Mfrs.: Arbor Oil Continental Co., Mülhausen, Germany.

OIL, ARISTOL, is a 10 per cent. sterilized solution of aristol (dithymol iodide) in sesame oil, and occurs as a clear, reddish-brown, permanent liquid that has been recommended for use in various eye diseases.

OIL BIRCH WOOD FORMALDEHYDATED (*oleum rusci formaldehydatum*) is an analogue of empyroform, made by Greiner & Co., Glarus, Switzerland.

OIL CYPRESS (*oleum cupressi*) is a colorless, volatile oil obtained from the fresh leaves and tender shoots of *cupressus sempervirens*. It is employed as an antiseptic and antispasmodic, chiefly in whooping cough—a little sprinkled upon the child's pillow and about the patient's room.—Mfrs.: essential oil makers in general.

OIL, DIGITALIN, or *huile digitalique* *Nativelle*, is an oily solution of Nativelle's digitalin (practically identical with digitoxin), containing $\frac{1}{2}$ milligram in each c.c., and used slightly warmed by subcutaneous injection as a heart stimulant. Dose, 1 c.c. once or twice daily.

OIL, MARGOSA, is an oil obtained from the Indian lilac or "neem" tree. It is employed in leprosy, rheumatism, suppurating glands, etc.; also in mange of dogs.

OIL, MELALEUCA VIRIDIFLORA, is referred to under its trade name, *gomenol*.

OIL, MERCURIOL, is a 45 per cent. trituration of mercuriol (mercuramalgam) in equal parts of lanolin and almond or olive oil. It is used subcutaneously in syphilis in doses of 1 to 3 minims.

OIL SALOSANTAL. See *salosantol*.

OILS OF ATROPINE, ESERINE, COCAINE and PILOCARPINE, according to Dr. von Pflugk, consist of solutions of the respective alkaloids (the uncombined bases) in a specially purified peanut oil.—Mfrs.: E. Funck, Radebeul, Germany.

OKERTIN is a water containing sulphates, free sulphuric acid, manganese and magnesia compounds, and traces of copper. It has an acidulous, astringent taste, and is used in eye diseases, gynecological affections, etc.

OKISTYPTIN is a brand name recently applied to *co-tarnine hydrochloride*, a product hitherto marketed only under the trade name of *stypticin*. The preparation is employed as a uterine hemostatic as well as a dental styptic.—Mfr.: Phil. Röder, Vienna, Austria.

OLAN is a generic name given to vasolniments, a class of substances that are intended to be used like the vasogens. These substances are paraffin preparations that form perfect, stable emulsions with water ("oilments"),

and are removable from the skin or body linen with water. Camphor, guaiacol, iodine, mercury, naphthol, and other olans are marketed; also a solid olan ("unguentum naftæ").—Mfr.: Dr. W. Sternberg, Wutha-Eisenach, Germany.

OLBIOS is a yellowish mass intended as a food and robustant, the composition of which is unknown.

OLEAC is an eczema remedy made from pine needles, oil of cade, stavesacre seed, and cloves.—Mfr.: S. T. Manchester, New York.

OLEOCREOSOTE (so-called *creosote oleate*) is obtained by the action of phosphorus trichloride upon a mixture of equal quantities of pure oleic acid and creosote. It forms a yellowish, nearly odorless oil of nonpronounced creosote taste. A few years ago it was in vogue as a substitute for creosote, but since the introduction of creosotal it has been but little heard of. Dose, 15 to 45 minims three times a day, in capsules or emulsion or with cod liver oil.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

OLEOMANGAN is described as an emulsion of olive and petroleum oils, with peptonates of iron and manganese. It is used as a hematinic and general tonic. Dose, a tablespoonful after meals, in hot water.—Mfrs.: Weightman Pharmacal Co., New York.

OLEORESIN PARSLEY SEED.—See *apiol green*

OLEOZONE, described by the manufacturers as "improved hydrocine," Dr. Roberts' treatment for consumption, essentially consists, according to analyses made at the chemical laboratories of the American Medical Association, of 95 per cent. of sugar, and oils of wintergreen, cinnamon, thyme and turpentine.—Mfrs.: Cowles' Institute, New York.

OLEUSABIN is a disinfectant preparation made mainly from eucalyptus.

OLGOFORM BR. and OLGOFORM I are preparations in which bromine and iodine respectively are said to be organically combined with oils. They are intended as succedanea for the alkali bromides and iodides respectively.

OLIOPHEN is a German gonorrhea remedy marketed as soft capsules each containing 8 minims. It is said to be a solution of salol in an olive-oil extract of linseed.—Mfrs.: Julius Norden & Cie, Berlin O, Germany.

OLIVEOL is the beta-oleic acid of olive oil, which differs from the alpha acid in its congelation point. It solidifies at 13° C., has a specific gravity of 0.807 at 15° C., is insoluble in water but very readily soluble in alcohol, is very easily saponified by alkalies, and is acid to litmus. Its molecular weight is 282.5, and its chemical formula is $C_{18}H_{33}O.OH$. It smells like very fresh olive oil. It is em-

played in biliary colic and gall-stone disease. Dose, 1.5 grams twice daily; in capsules.

OMAL is the terse name applied to *trichlorphenol* or *phenol trichloride*, $C_6H_2OHCl_3$; white crystals soluble in alcohol and ether; slightly soluble in water. It is used in 5 to 10 per cent. ointments or solutions in erysipelas, diphtheritic ulcers, etc., and by inhalation in tuberculosis.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

OMOFORM is a fine, brownish-yellow, odorless powder, of undivulged composition, and insoluble in the ordinary solvents. It is intended as a substitute for iodoform in surgical practice, and it is marketed also as suppositories, lozenges (2 grains), ointment (5 per cent.), and gauze.—Mfrs.: Penn Pharm. Co., Philadelphia, Pa.

OMOROL is an insoluble silver-albumin compound advertised chiefly for local use in diphtheria, but also employed in urethritis. It is said to dissolve the secretion of the throat and thus manifest its action upon the diphtheritic process. The general treatment with antitoxin is of course intended to be used in conjunction with omorol.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

OOPHORIN is a dry preparation of the ovaries of pigs and cows, marketed in 0.3 gram and 0.5 gram tablets and used in climacteric disorders of women, chlorosis, and the like. Dose, 1 to 3 tablets three times daily.—Mfrs.: Drs. Freund & Redlich, Berlin, Germany.

OPHTHALMOL, heralded as a remedy for granular eyelids, is, according to F. Frank, simply sterilized peanut oil. Marketed by Dr. Schaffner, Basle, Switzerland.

OPIAN is a synonym of *narcotine*.

"OPO" is a prefix used in connection with a line of dry organo-therapeutic preparations introduced by Prof. A. von Poehl of St. Petersburg. These products are said to contain the active constituents of the respective organs in the most concentrated form possible, the tissue structure and precipitable albuminoids, that are without therapeutic action, having been removed. One part represents 10 to 20 parts of the fresh organ. *Opo-cerebrin* is made from the gray matter of the brain, and is prescribed in nervous affections, slow heart, etc., in doses of 3 to 5 grains thrice daily, as tablets (so marketed). It comes also in liquid form for injection. *Opo-hepatoidin* is made from livers and is used in jaundice, cirrhosis, etc.; 8 to 20 grains three times a day. *Opo-hypophysin*, from the pituitary body (*hypophysis cerebri*), is prescribed in acromegalia; dose, $\frac{3}{4}$ grain. *Opo-lienin* is made from the spleen, and employed in enlarged spleen, leucemia, etc.; dose, 30 to 90 grains twice a day. *Opo-medullin*, from red bone-marrow, is used in pernicious anemia, neurasthenia, chlorosis, etc.;

dose, 3 to 15 grains three times a day. *Opo-orchidin* is prepared from bulls' testicles, and used in spinal diseases and other nervous disorders; dose, 3 to 15 grains three times daily. *Opoossin*, from yellow bone-marrow, is prescribed in rickets and osteomalacia; dose, 3 to 15 grains thrice daily. *Opo-suprarenalin* is derived from the suprarenal capsule, and employed in diabetes insipidus, Addison's disease, change of life, etc.; dose, 3 to 6 grains twice daily. *Opo-thyroidin*, from thyroid gland, is prescribed in myxedema, cretinism, obesity, etc., in doses of $\frac{3}{4}$ to $1\frac{1}{2}$ grains three times a day. *Opo-ovulin*, from ovary substance, is employed in climacteric disturbances of women, hysteria, etc.; dose, 3 to 12 grains three times a day. *Opo-prostatin* is employed in hyperthrophy of the prostate gland; dose, 3 grains three times a day.—Marketed by Lehn & Fink, New York.

OPOENTERIN. See *enterin Poehl*.

OPSONOGEN is "a staphylococcus vaccine prepared according to the method of Wright and Strubell; 1 c.c. represents 100,000,000 killed staphylococci." Its indications are local staphylococcus infections, particularly furunculosis, acne, weeping eczema, and other cutaneous diseases. Dose, at first 0.5 to 0.75 c.c., gradually increasing to 5 c.c.—Mfrs.: Chem. Fabrik Güstrow, Güstrow, Germany; agts.: Lehn & Fink, New York.

OPYINE is a preparation of opium claimed to be free from all objectionable constituents—an unsupportable claim, as all opiates and other hypnotics are essentially deleterious.—Mfrs.: Penn Pharm. Co., Philadelphia, Pa.

ORANGEINE, according to reports from the chemical laboratory of the American Medical Association, is a mixture of acetanilid 43 parts, caffeine 10 parts, and sodium bicarbonate, 18 parts; with (according to the makers) small proportions of podophyllin, nux vomica and blue flag. Its action is that of an antipyretic and analgesic. Marketed only as powders, each of which constitutes an average dose.—Mfrs.: Orangeine Chem. Co., Chicago, Ill.

ORCHIDIN is a liquid extract of bulls' testicles, free from albuminous material, and used subcutaneously in neurasthenia, senility, etc.

ORCHIDIN GUAIACINATED is described as an organo-therapeutic preparation containing guaiacin. It occurs as a brown liquid containing a small percentage of alcohol and having an aromatic taste. It is employed in gouty arthritis.

ORCHIPIN is an Italian specialty, an oily extract of fresh bulls' testicles, heralded as an efficient antidote in atropine poisoning and as a nerve tonic in neurasthenia, etc.

ORESOL (*oreson*) is defined as guaiacol glycerin (or glyceryl) ether, and thus appears to be identical with *guaiamar*, which see.

OREXINE was the name originally applied to *phenyl-dihydro-quinazoline hydrochloride*, introduced by Prof. Penzoldt in 1890. Three years later it was applied to the pure base, *phenyl-dihydro-quinazoline*, which product, because possessing less of the pungent taste and irritating properties of the hydrochloride, superseded the latter. Now the name applies to the *tannate* of the same base, introduced by Dr. Steiner in 1897. This preparation occurs as a yellowish, odorless and practically tasteless powder, insoluble in water and only slightly soluble in alcohol. It is prescribed as an appetizer and stomachic, as well as for sea-sickness and vomiting of pregnancy and that following narcosis. Dose, 8 to 12 grains twice daily, 1 hour before meals, with water. Marketed also as 4-grain tablets. Incompatible with iron compounds.—Mfrs.: Kalle & Co., Biebrich, Germany; agts.: Merck & Co., New York.

ORGANO-GLYCOLYTICA.—See under *tannin-organotherapeutic preparations*.—Mfrs.: Chem. Fabrik "Rhenania," Aix-la-Chapelle, Germany; agts.: Merck & Co., New York.

ORGANOSOL is an alcoholic solution of colloidal silver (collargol).

ORGULATUM is an external application for inflammation and congestion, being advertised in the medical press, and stated to contain in each pound, 1 ounce of olive oil, 1 ounce of eucalyptus oil, 1 ounce of thyme oil, $\frac{1}{2}$ ounce of glycerin, $\frac{1}{2}$ ounce of camphor, 2 drams of compound tincture of benzoin and 1 dram each of chloretone and menthol, with petrolatum and beeswax.

ORIGOS TABLETS are said to contain gluten and "all the substances necessary to the development of the body"—probably calcium phosphate and fluorides—in soluble form. It is used as a nutritive in debility, arrested development, etc.—Mfrs.: Ebert & Meincke, Bremen, Germany.

ORPHOL (*naphthol-bismuth*; *bismuth beta-naphtholate*) is said to contain about 20 per cent. of combined beta-naphthol, with about 64 per cent. of combined bismuth oxide as well as about 16 per cent. of free bismuth oxide. It occurs as a grayish-brown, almost odorless powder, of non-pronounced taste, and becoming darker and more odorous with age; insoluble in water, slightly soluble in alcohol. Incompatible with acacia mucilage. It is prescribed as a gastro-intestinal disinfectant and astringent. Dose, 8 to 20 grains several times daily; children, 2 to 5 grains. Marketed also as 5-grain tablets.—Mfrs.: Von Heyden, Radebeul near Dresden; agts.: Schering & Glatz, New York.

ORSUDAN is the trade name adopted for *sodium methylacetylaminophenylarsonate*, $(C_6H_5.NH.CH_2CH_2CO)-As.OH.ONa$. It contains 25.4 per cent. of arsenic, and is soluble in 4 parts of water, yielding solutions that can be sterilized by boiling for five minutes. It is used as an *antiluetic* and alterative (like soamin, to which it is chem-

ically related), but claimed to be less toxic even than soamin. Dose, per os (skin diseases), $\frac{1}{4}$ to 1 grain after meals; by intramuscular injection (syphilis), 5 to 10 grains every other day.—Mfrs.: Burroughs, Wellcome & Co., New York. [Caution should be observed in the administration of the arylarsonates such as orsudan, soamin, atoxyl, etc., as in certain cases toxic symptoms have arisen despite the diminished toxicity of this class of organic arsenic compounds.]

ORTHO-BROMPHENOL.—See *monobrom-phenol*.

ORTHOCOL is defined by the manufacturer as "an alkaline salt of gualacol," soluble in water, lacking odor and distinctive taste—probably *potassium guaiacol-sulphonate* (better known as thiocol). It is the main ingredient of "elixir of orthocol comp." ("benzo-guaiacol"), which contains in each 2-teaspoonful dose 4 grains of the drug with 2 grains of terpin hydrate and $\frac{1}{12}$ grain of codeine phosphate. It is used in phthisis and chronic bronchitis. Dose, 5 to 10 grains three times daily.—Mfrs.: Larimore & Co., New York.

ORTHO-CRESOL IODIDE is better known as *traumatol*.

ORTHO-ETHOXY-MONOBENZOYL-AMIDO-QUINOLINE is a chemical designation for *quinalgen*.

ORTHOFORM as now marketed is the *methyl ester of meta-amido-para-oxybenzoic acid*, $C_6H_3.NH_2.OH.COOCCH_3$. It occurs as a white, bulky odorless, tasteless powder, slightly soluble in water, soluble in 6 parts of alcohol, and 50 parts of ether; it dissolves readily also in collodion. It is prescribed as a local anesthetic and antiseptic, in painful wounds, ulcerated larynx, etc., in 5 to 20 per cent. ointments, paints or dusting powders, or pure; internally in ulcer and neuralgia of the stomach. Dose, 5 to 15 grains; locally in substance as a dusting-powder or mixed with milk sugar for insufflation, in collodion, salve, etc. *Orthoform hydrochloride* is identical in action with the base, but freely soluble in water. It has been used hypodermically, but found rather irritating, and hence has been practically abandoned. Orthoform must not be exposed to light. It is incompatible with antipyrin, bismuth subnitrate, mercuric chloride, silver nitrate, zinc chloride, and potassium permanganate.—Mfrs.: Meister, Lucius & Brünig, Hoechst-on-M.; agts.: V. Koechl & Co., New York.

ORTHONAL, a dental anesthetic, consists of cocaine, alypin, adrenalin solution (1:1000) and physiological salt solution. It is marketed in ampuls.

ORTHO-OXY-BENZYL ALCOHOL.—See *diathesisin*.

ORTHO-OXYBENZYLIDEN-PARA-PHENETIDIN is a synonym of *malakin*.

ORTHO-OXYQUINOLINE-META-SULPHONIC ACID is described under its trade name, *diaphtol*.

ORTHO-PHENOLSULPHONIC or ORTHO-SULPHOCARBOLIC ACID.—See *aseptol*.

ORUDON. Two preparations, a liquid ("essence") and a solid ("salt") are marketed under this name and recommended as antirheumatics and antineuralgics. According to Aufrecht, the liquid contains as its chief constituents iodine, salicylic acid and piperazin, while the solid, which is also recommended for gout, contains urea, diuretin and the sulphates and carbonates of magnesium, lithium and sodium.—Mfrs.: Hof-Apotheke, Elbing, Germany.

OSMIUM TETRAOXIDE.—See *acid osmic*.

OSMOSINE is an eye drop of undivulged composition.—Mfr.: G. W. Carnrick, New York.

OSMOSUM is described as consisting of aluminium silicate, glycerin and phenol. It is intended as a succedaneum for flaxseed poultices, and is supplied also with further medicamentous additions (picratol, etc.)—Mfrs.: Eli Lilly & Co., Indianapolis, Ind.

OSSAGEN is said to consist of the calcium salts of the fatty acids of bone marrow. It is given in rickets and osteomalacia. Dose, 30 grains three times a day.

OSSALIN (*adepts ossium*) is a greenish-white fat prepared from bone marrow and recommended as an ointment base, taking up twice its weight of water.—Mfrs.: J. E. Stroschein, Berlin; agts.: Fischer Chem. Importing Co., New York.

OSSIN is a saccharated emulsion of cod liver oil made without gum, permanent, and readily miscible with water. Another ossin as a dark-brown, liquid extract of bone marrow used chiefly in diabetes in doses of $\frac{1}{2}$ to 1 teaspoonful after meals.—Mfr. of latter: J. E. Stroschein, Berlin, Germany; agts.: Fischer Chem. Importing Co., New York.

OSSOTAN is a prepared hempseed meal free from fatty oil. It is offered as a food and roborant for children.—Mfr.: E. Rode, Hamburg, Germany.

OSTA preparations of Dr. Kleinsorgen contain organic bone salts. There are marketed *osta biscuits*, carrying $7\frac{1}{2}$ per cent. of osta salts, *osta biscuits powdered* and sweetened for adding to infants' food, *osta chocolate* containing $7\frac{1}{2}$ per cent. of osta salts, and *osta pastilles* carrying 10 per cent. of osta salts.—Mfrs.: Stollwerck Bros., Cologne (Germany) and New York.

OSTAUXIN is a new designation for calcium *para-nucleinate*. The article is given in doses of 5 to 15 grains as a tonic and roborant.—Mfr.: Gideon Richter, Budapest, Hungary.

OSTEOGEN is a syrup of iron and calcium phosphate, used in rickets and the like.—Mfrs.: Hirsch-Apotheke, Darmstadt, Germany.

OSTON is the name of a cod liver oil emulsion.

OSTOPHIT is a phosphorized cod liver oil emulsion.

OVADIN is a pulverulent preparation of ovary substance, analogous to ovariin.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle (Switzerland) and New York.

OVARADEN is a standardized dried extract of ovary, 1 part representing 2 parts of the fresh gland; a grayish, nearly odorless, sweetish powder, administered in disorders accompanying the menopause or following ovariectomy, chlorosis, etc. Dose, 15 to 30 grains three times daily, usually as tablets.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

OVARADEN-TRIFERRIN is a tablet containing 0.3 gram (5 grains) of ovaraden and 0.1 gram ($1\frac{1}{2}$ grains) each of triferrin and chocolate. It is used in diseases of women following removal of the ovaries and in climacteric disturbances. Dose, 1 or 2 tablets after meals.

OVARIAL is a synonym of *ovarin*.

OVARIAN EXTRACT has been administered, often with apparently good results, for the relief of symptoms following the menopause and in dysmenorrhea, intermenstrual pain, etc.

OVARIGEN is another preparation of fresh ovary substance.—Mfrs.: Hof-Apotheke, Kiel, Germany.

OVARIIN (*ovarial*) represents the dried ovaries of the cow, 1 part equalling 8 parts of the fresh organ. Its uses are the same as those of ovaraden. Dose, 3 to 6 grains three times a day, in pills or tablets. Marketed also as 3-grain tablets.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

OVARIN is a preparation used in menstrual disturbances and menorrhagia, the active constituents of which are berberine and ovarian extract.—Mfr.: Dr. Grüber, Leipsic, Germany.

OVARON.—See under *tannin-organotherapeutic preparations*.

OVOFERRIN is a reddish-brown, nearly odorless, slightly aromatic 5 per cent. solution of an organic iron compound, "synthetic iron vitellinate," to which the formula $C_{44}N_{17}SH_2Fe_8O_{22}$ has been assigned; each tablespoonful is equivalent to 1 grain of elementary iron. It contains about 9 per cent. of alcohol. It is used as a "blood builder." Dose, $\frac{1}{2}$ to 1 tablespoonful in water or milk before meals and at bedtime; children, 1 to 2 teaspoonfuls.—Mfrs.: A. C. Barnes Co., Philadelphia, Pa.

OVOGAL is described as a compound of the biliary acids with albumin, prepared according to a patented process. It is a greenish-yellow powder insoluble in water and the rest of the ordinary solvents as well as in diluted acids, but soluble in alkali solutions with decomposition. It

should not therefore be dispensed with alkalis in liquid or pill form. It is intended for use in intestinal catarrh, chronic constipation, and especially in diseases of the liver and the bile ducts. Dose, 15 to 60 grains in water. The dose should be swallowed quickly, lest the alkaline saliva decompose the product and develop the disagreeable bitter-sweet taste of the biliary acids. The addition of a little peppermint oil-sugar renders it more pleasant. Very sensitive patients must take it in capsules.—Mfrs.: J. D. Riedel Co., Berlin and New York.

OVOLAX is a laxative confection containing phenolphthalein as its active constituent.—Mfrs.: John Wyeth & Bro., Philadelphia, Pa.

OVO-LECITHIN.—See *lecithin*.

OVO-MALTIN is a dry preparation of malt extract, eggs, milk and cacao, recommended as a roborant.—Mfr.: Dr. A. Wander, Berne, Switzerland.

OVO-PROTOGEN is the same as *protogen*.

OVOS is a yeast extract intended to serve as a substitute for meat extract, though lacking the stimulating properties and the salts and bases of the latter. It is obtained by boiling yeast in steam, and evaporating the resulting liquid in a vacuum pan to the consistency of an extract. It yields a cloudy solution with water, is feebly alkaline, salty in taste, and has a faint odor.—Mfrs.: Eiweiss-Extrakt Co., Berlin N, Germany.

OXAPHOR is a 50 per cent. alcoholic solution of oxycamphor, $C_{10}H_{16}O_2$, a white, crystalline powder, of peppery bitter taste and easily decomposing when exposed to light or water. It is soluble in about 50 parts of water, readily in alcohol, ether or chloroform. It is used chiefly in dyspnea, emphysema, and asthma. Dose, 15 to 45 minims two or three times a day, well diluted, in sweetened mixture usually.—Mfrs.: Meister, Lucius & Brünig, Hoechst, Germany; agts.: V. Koechl & Co., New York.

OXIDOL (not Oxydol) is "a combination of pinus sylvestris, boric acid, calendula, acetanilide and eucalyptus (antiseptically aromatized);" a grayish-yellow powder of pleasant odor. It is exploited as a vulnerary.—Mfrs.: Oxidol Chem. Co., Boston, Mass.

OXIE is a generic name applied to pills, tablets and pastilles consisting, according to the manufacturers, of a "combination of valuable, non-poisonous medicaments that cure nervous and cardiac diseases and at the same time exert a beneficial influence upon digestion and the blood." According to Dr. F. Zernik, the oxie pills are composed essentially of podophyllin, capsicum and sodium carbonate, and the oxie tablets of a mixture of cane sugar, milk sugar, corn starch and small quantities of sassafras and *gualtheria* oils, and colored red with eosin.—Mfrs.: Giant Oxie Co., London, Eng.

OXONE is the trade name applied to *fused sodium peroxide* containing a fractional percentage of a catalytic agent. It is said to yield the entire content of available oxygen upon contact with water.—Mfrs.: Roessler & Hasslocher Chem. Co., New York.

OXYCAMPHOR. See under *ozaphor*.

OXYCHLORINE is represented to be a "double salt of sodium and potassium tetraborate combined with boron oxychloride, thus: $(6\text{NaKB}_4\text{O}_7)\text{BOCl}_3$." It is recommended as an antizymotic and as a wound antiseptic. According to analyses made at the chemical laboratory of the American Medical Association, it is "essentially a mixture of potassium chlorate, sodium nitrate, potassium tetraborate, sodium tetraborate and boric acid."—Mfrs.: Oxychlorine Chem. Co., Chicago, Ill.

OXYDAR is the trade name adopted for a hydrogen dioxide preparation prepared by a patented process, and intended for internal use in gastrointestinal diseases. It is marketed in glass tubes containing about 2 fluid drams, which fact suggests caution, as hydrogen dioxide solutions are liable to cause explosion.—Mfrs.: Chem. Fabrik "Helfenberg," Helfenberg, Germany; agts.: C. Reinschild Co., New York.

OXYDASINE is a mixture of 1 volume of 1:2000 solution of vanadic acid and two volumes of glycerin, employed externally as an antiseptic in carbuncle, tuberculous lesions, skin diseases, etc., in 10 to 33 per cent. dilution in glycerin; internally as an alterative in place of vanadic acid.

OXYDASE TABLETS have been stigmatized by the American Medical Association as "a fake consumption cure" exploited by the Oxydase Co., New York.

OXY-DIMETHYL-QUINAZINE is *antipyrin*.

OXYDOL is a brand of *hydrogen peroxide* solution.

OXYGENOL is a 3 per cent. (10-volume) solution of hydrogen dioxide made by Rikstel, Stockholm O, Sweden.

OXYMENTHOL is an analogue of the article known in this market as *menthozol* and employed mainly as an antiseptic and anodyne gargle in inflammatory throat ailments.—Mfrs.: Hoeckert & Michalowsky, Berlin SW, Germany.

OXYMETHYL-ALLYL-SULPHOCARBAMID.—See *pyoluene*.

OXYMETHYLENE.—See *formaldehyde*

OXYNAPHTYL-ORTHO-OXY-TOLUYLIC ACID is *epi-carin*.

OXYNOLEUM (*oxygen-ointment*) is an ointment advertised for use in varicose ulcers and inflammatory skin diseases. Its active ingredient is probably some alkali peroxide or perborate.—Mfrs.: Bioplasm Mfg. Co., New York.

OXYNTIN is described as a compound of protein and hydrochloric acid containing 5 per cent. of the latter in unstable combination. It occurs as a dry, granular powder, readily miscible with water. It is said to be useful as a substitute for diluted hydrochloric acid in the digestion of protein. Dose, 5 to 15 grains, with water or in capsules.—Mfrs.: Fairchild Bros. & Foster, New York.

OXYQUINASEPTOL is described under *diaphtherin*.

OXYQUINOLINE-ALUM.—See *chinosol*.

OXYQUINOLINE PHENOLSULPHONATE or SULPHOCARBOLATE is *diaphtherin*.

OXYSANTONIN.—See *artemisin*.

OXYSEPSIN is a preparation similar to oxytuberculin, made from a culture of the sputum of a tuberculosis patient with high fever.

OXYSPARTEINE, $C_{15}H_{24}N_2O$, is an oxidation product of sparteine, occurring as white or faintly yellowish crystals soluble in most of the usual solvents. It is used in heart failure, generally as its hydrochloride, subcutaneously. Dose, $\frac{1}{2}$ to $1\frac{1}{2}$ grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

OXY-TOLUOL-TROPINE or OXY-TOLUYL-ATROPEINE is *homatropine*.

OXYTUBERCULIN is what J. O. Hirschfelder calls an oxidized tuberculin. Its advantage over tuberculin is said to be the fact that it can be given in relatively large doses (daily 20 c.c.) without untoward effect.

OZET Baths consist, according to A. Laqueur, of sodium perborate and manganese borate, which on coming into contact with water generate a current of oxygen lasting for fifteen to twenty minutes. First the perborate is dissolved in the water, and then the manganese borate, which acts as a catalyser, is distributed through the bath as uniformly as possible.

OZOGEN is a trade name for a 3 per cent. solution of *hydrogen peroxide*.

OZONAL and SEDLOZON are trade-marked names for tablets used for producing oxygen baths, by the action of sodium peroxide and sodium bicarbonate on water.—Mfr.: L. W. Sedlitzky, Hallein, Germany.

OZONATONE is a disinfectant said to consist of oil of turpentine, oil of eucalyptus, oil of bergamot, benzoin, tolu balsam and oil of cassia.

OZONOFORM is a disinfectant mixture of unknown composition.—Mfrs.: Kronen-Apotheke, Berlin W, Germany.

P

PAIDOL is an infant food manufactured in Switzerland and consisting essentially of powdered cereals.

PALMA LIQUA is the name applied to a preparation said to be a concentrated infusion of a South American leek. The preparation is exploited chiefly as a cure for malaria but also as a systemic disinfectant in typhoid fever and other infectious diseases.

PALMIACOL or *cetiocol* is a derivative of gualacol, for which the formula $C_{22}H_{40}O_2$ is given, and which has been defined chemically as *cetyl-guaiacyl* or *pyrocatechin-methyl-acetyl ether*. It is marketed as a liquid of non-pronounced taste, insoluble in water but soluble in the remainder of the ordinary organic solvents, and put up in pearls containing 3 minims each. It is intended as a substitute for gualacol and creosote internally, chiefly in tuberculosis and chronic bronchitis. Dose, 1 to 3 or more pearls three or four times daily.—Mfrs.: Trommer & Co., Fremont, O.

PANASE is described as a combination of the digestive enzymes of the pancreas derived from the pancreas of the pig. It is a yellowish-white powder having a faint odor and a slight mucilaginous taste. It is not entirely soluble in water or glycerin, owing to the small amount of protein present. It is incompatible physiologically with strong alcohol, acids, alkalies and other substances which destroy the activity of enzymes. Panase is used as an amylolytic and wherever the enzymes of the pancreas are deficient. Dose, 2 to 5 grains.—Mfrs.: F. Stearns & Co., Detroit, Mich.

PANASE ESSENCE is a mixture containing in each 100 c.c., 4 grams of panase in a menstruum containing 14 per cent. of alcohol and 12½ per cent. of glycerin, with small amounts of flavoring matter and sugar. Dose, 1 to 2 fluid drams.—Mfrs.: F. Stearns & Co., Detroit, Mich.

PANCREADEN is a lactose trituration of dried extract of the pancreas, 1 part of which represents 2 parts of the fresh gland. It is used in diabetes mellitus. Dose, 15 to 60 grains three or four times daily.—Mfrs.: Knoll & Co., Ludwigshafen, Germany, and New York.

PANIMIT FEIGEN (Figs) are said to be figs treated with phenolphthalein and coated with chocolate. They are intended for use as a laxative.

PANKREATO-KINASE.—See under *eukinase*

PANKREON is a compound of pancreatin with 10 per cent. of tannin, that is said to resist the action of the gastric juice; a fine, grayish-red powder, of a peculiar nut-like odor and not unpleasant taste, and insoluble in water and dilute acids. It is prescribed in pancreatic diabetes, intestinal indigestion, etc. Dose, 4 to 8 grains thrice daily. Marketed also as 4-grain tablets.—Mfrs.: Chem. Fabrik "Rhenania," Aix-la-Chapelle, Germany; agts.: Merck & Co., New York.

PANKREON B is a variety of pankreon intended for veterinary use, particularly as a prophylactic and curative in the diarrhea of calves.

PANOPEPTON is a medicinal food said to be prepared from beef and wheat by digestion with gastric and pancreatic juices. It contains about 6.35 per cent. of nitrogenous matter, about 11 per cent. of carbohydrates, and about 20 per cent. of alcohol by volume. It occurs as a light-brown fluid, acid in reaction, and possessing largely the odor and taste of sherry wine. Dose, 2 to 4 fluid drams several times a day, and at bedtime.—Mfrs.: Fairchild Bros. & Foster, New York.

PANTASE contains the ferments of the pancreas of hogs.

PANTHOL is defined as a sterile, permanent yeast preparation, containing no added medicaments. It is put forward as a remedy in furunculosis, sluggish wounds, chronic skin diseases, etc.—Mfrs.: Hefekonserven-fabrik, Munich, Germany.

PANTOPON is an opium preparation introduced at the instigation of Prof. Sahli, of Berne, Switzerland. It is said to represent the total alkaloids of opium as hydrochloride and in soluble form eligible also for hypodermic use. Dose, $\frac{1}{4}$ to $\frac{1}{2}$ grain; subcutaneously it is used in 2 per cent. solution in a mixture of 3 parts of sterilized water and 1 part of glycerin. (Such a solution is supplied in ampules.)—Mfrs.: Hoffmann-LaRoche Chem. Works, Basle (Switzerland) and New York.

PANZYME is a combination of diastase, pancreatin, pepsin and rennin, together with carminatives and aromatics. It is employed as a digestive.—Mfrs.: F. Stearns & Co., Detroit, Mich.

PAPAIN, PAPAYOTIN, PAPOID, CAROID and **VEGETABLE PEPSIN** are various names applied to the digestive ferment contained in the juice of the fruit and leaves of carica papaya (papaw). The drug occurs as a whitish-yellow, slightly hygroscopic, odorless powder, soluble in water and glycerin, but insoluble in alcohol. It is active in alkaline, neutral or acid solution, especially in the first-named. It is used externally as a solvent of false membranes, and in fissured tongue, etc.—5 per cent. solution in equal parts of glycerin and water; internally as a digestive. Dose, 2 to 5 grains.—(Nonproprietary.)

PAPAYANS is said to consist of the "digestive principle obtained from the fruit of carica papayans, combined with willow charcoal, sodium bicarbonate and aromatics." Examinations of specimens examined at the chemical laboratory of the American Medical Association showed these tablets to contain "charcoal, sodium bicarbonate, ginger, saccharin and oil of gaultheria. As the product is said to contain papain, the presence of enzymes was tested for, with the result that it was found to possess neither

proteolytic nor amylolytic properties." Papayans are exploited as a general digestive and antacid. Dose, 1 to 3 tablets.—Mfrs.: Bell & Co., Orangeburg, N. Y.

PARA-ACETAMIDO-PHENETOL is another synonym of *acetphenetidin*.

PARA-ACETANISIDIN.—See *methacetin*.

PARA-ACETPHENETIDIN is a synonym of *acetphenetidin* (official).

PARA-AMIDOBENZOIC ACID ETHYL ESTER is the chemical designation for *anesthesin*, which see.

PARA-AMIDOBENZOIC ACID ISOBUTYL ESTER is a yellowish-white, neutral powder of pungent taste, easily soluble in alcohol or ether, sparingly soluble in water. Its melting-point is 64° to 65° C. It is intended for use as a local anesthetic applied as powder or ointment.

PARABISMUTH is a *bismuth paranucleinate* containing 50 per cent. of metallic bismuth. It occurs as a pale-yellow, odorless powder having a slight astringent taste, insoluble in water and acid liquids, and decomposed slowly by alkaline solutions. It is used as a gastrointestinal sedative and astringent. Dose, 5 to 10 grains several times daily.—Mfr.: Gideon Richter, Budapest, Hungary.

PARA-CHLORPHENOL (*para-monochlorphenol*), $C_6H_4Cl.OH$, occurs as colorless crystals that are readily soluble in alcohol, ether or alkalies, but sparingly soluble in water. It is used as an antiseptic; in 2 per cent. ointments in erysipelas and syphilitic ophthalmia, in 5 to 20 per cent. glycerin solution in laryngeal tuberculosis, in substance in dental caries, etc.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

PARA-CHLORSALOL.—See *chlorosalol*.

PARACOTOIN, $C_{12}H_{10}O_4$, is a neutral indifferent bitter principle derived from paracoto, the bark of an undetermined South American tree, probably a species of *cryptocarya*. It occurs as a pale-yellow, odorless and tasteless crystalline body, sparingly soluble in water but easily soluble in ether or chloroform. In small doses (1/20 to 1/6 grain) it is used as an appetizer, and in larger doses (1 to 3 grains) as an intestinal astringent.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

PARA-DIETHOXY-ETHENYL - DIPHENYL-AMIDINE HYDROCHLORIDE.—See *holocaine*.

PARAFORM or PARA-FORMALDEHYDE, more correctly *trioxymethylene*, and also known as *triformol*, is polymerized formaldehyde, $(CH_2O)_n$; a white powder, insoluble in alcohol or ether, and giving off formaldehyde at ordinary temperature and more rapidly when heated. It is used chiefly for the generation of formaldehyde gas for disinfectant purposes, also on warts (10 per cent. suspension in collodion); it is occasionally prescribed as an in-

testinal disinfectant in diarrhea, and it is employed in dentistry for disinfecting root canals. Dose, 3 to 10 grains. See caution under *formaldehyde*.—(Nonproprietary.)

PARAGANGLIN is a liquid extract of suprarenal gland, made in Italy; a clear, yellowish fluid of sweetish taste. It is employed in gastric dilatation, intestinal atony, skin diseases of gastro-intestinal origin, etc. Dose, 5 to 10 drops several times daily; in constipation, 30 to 50 drops as enema.

PARAHEMOGLOBIN is a preparation made from blood, containing 0.39 per cent. of iron; a brown, odorless, and tasteless powder, insoluble in water but soluble in weak solutions of the alkalies. Dose, 5 to 10 grains 3 times a day. It is marketed also as *iron* parahemoglobin (5 per cent. Fe); *copper* parahemoglobin (0.4 per cent. Fe, 2 per cent. Cu); *manganese* parahemoglobin (0.4 per cent. Fe, 1½ per cent. Mn); *bromine*, *iodine*, and *mercury* parahemoglobin.—Mfrs.: G. Hell & Co., Troppau, Austria.

PARA-iodo-GUAIACOL. See *guaiadol*.

PARA-LYSOL is a compound of cresol with an alkali, which, according to A. Nieter, forms white crystals melting at 146° C. and containing 8.3 per cent. of potassa and 91.7 per cent. of cresol. It is considered as a solid cresol soap, and thus appears to be very similar to *metakalin*. Like the latter, it is marketed in the form of 1-gram tablets, and is intended for disinfecting purposes in 1 to 3 per cent. solution.—Mfrs.: Schülke & Mayr, Hamburg, Germany; agts.: Lehn & Fink, New York.

PARANEPHRIN is a brand name for *epinephrine* as made by E. Merck, Darmstadt, and sold in this country by Merck & Co., New York.

PARANEPHRIN-NOVO-SUBCUTIN is a local anesthetic employed for intraspinal injections and for dental purposes. Novocaine is the anesthetizing constituent, and paranephrin the vaso-constrictor component.—Mfr.: Dr. E. Ritser, Frankfurt-on-M., Germany; agts.: V. Koechl & Co., New York.

PARA-OXY-ETHYL-ACETANILID is *acetphenetid*in.

PARA-OXYMETHYL-ACETANILID.—See *methacetin*.

PARA-PHENETIDIN CITRATE is a synonym of *citrophen*.

PARA-PHENETIDIN SALICYL-ACETATE.—See *phenosol*.

PARAPHENETIDIN TARTRATE. See *vinopyrin* and *tartrophen*.

PARAPLASTA is what Dr. P. G. Unna of Hamburg calls a new plaster mass spread on closely woven cotton fabric, resembling gutta percha mull. It adheres well to the skin, and is marketed medicated with zinc oxide, mercury,

chrysarobin, salicylic acid, etc.—Mfrs.: P. Beiersdorf & Co., Hamburg, Germany; agts.: Lehn & Fink, New York.

PARA-PLEJAPYRINE is claimed to be a homogeneous chemical compound of equal molecules of paratoluol-sulphamide and phenyl-dimethylpyrazolon. It is proposed as an antipyretic and analgesic.—Mfr.: Dr. A. Voswinkel, Berlin W, Germany.

PARAREGULIN is a modification of regulin. It consists of an emulsion of liquid paraffin, containing 10 per cent. of extract of cascara sagrada. The paraffin oil is said to soften and loosen the feces, without chemically irritating the intestinal walls. The article is marketed in gelatin capsules containing 3 grams, and issued specifically to regulate and facilitate the movements of the bowels.—Mfrs.: Chem. Fabrik "Helfenberg," Helfenberg, Germany; agts.: C. Reinschild Co., New York.

PARARENOL is the trade name for a solution of the active principle of the suprarenal capsule, as marketed by Rich. Fürst, Berlin, Germany. See *epinephrine*.

PARATHYROIDIN is a preparation of the parathyroid gland marketed as tablets each containing 0.1 gram of epithelial substance. The product is intended for use chiefly in tetanus.—Mfrs.: Drs. Freund & Redlich, Berlin A, Germany.

PARATHYROID GLAND DESICCATED is a light-yellow powder having a peculiar odor and only partly soluble in water. One part represents about six parts of the fresh gland. It is used especially in tetany following removal of the parathyroids. Dose, 1/10 grain, four times a day.—Mfrs.: Armour & Co., Chicago, Ill.

PARAXIN (*dimethylaminoparaxanthine*) occurs as a white, fleecy, crystalline mass soluble in weakly alkalized water as well as in diluted acids. With strong alkali solutions it yields readily soluble salts. It melts at 226° C., subliming at the same time. According to Forschbach and Weber, it is a diuretic about equal to diuretin, but still not without by-effects such as gastric disturbance and nausea.

PARENOL (*solid parenol*) is an ointment base recognized in the British Pharmaceutical Codex, and having the following formula:

Soft paraffin (petrolatum)	65 parts.
Wool fat	15 parts.
Distilled water (warm), q.s. ad.....	100 parts.

Melt the petrolatum and wool fat, pour the mixture into a warm mortar and gradually add the distilled water. The product will take up more than its own weight of water, and mixes readily with all fats.—(Nonproprietary.)

PARENOL LIQUID is another B. P. C. preparation, made as follows:

Liquid paraffin (liquid petrolatum).....	70 parts.
White beeswax	5 parts.
Distilled water (warm), q.s. ad.....	100 parts.

Melt the wax in the liquid petrolatum, pour the mixture into a warm mortar, and gradually add the distilled water. The product is a neutral liquid suitable for lubricating catheters, as a vehicle for injections, etc.—(Nonproprietary.)

PARIETIN is identical with the well-known *chrysophanic acid*.

PARISOL is a liquid antiseptic, disinfectant, and deodorant, for use in the sick-room, ambulances, barracks, etc. According to Dr. Aufrecht, it contains formaldehyde, menthol, and perfumed soap spirit. According to Lenz and Lucius, it is an alcoholic solution of potash soap, containing about 10 per cent. of formaldehyde, besides carbolic acid, menthol and hydrocarbons.—Mfrs.: Bemse & Elcke, Einbeck, Germany.

PARNOTIS occurs in popular prescriptions for an obesity remedy. It is a cream-colored, fine powder having an odor of cologne. It is soluble in water almost completely, the insoluble portion apparently consisting of ferric hydroxide. According to analyses made at the chemical laboratories of the American Medical Association, it would appear that parnotis consists essentially of anhydrous sodium sulphate 25 per cent. and sodium bicarbonate 75 per cent.—Mfrs.: H. S. Peterson & Co., Chicago, Ill.

PARODYNE is one of the numerous synonyms of antipyrin; also the name of a French tablet containing antipyrin and sodium bicarbonate.

PAROGEN (*liquid parogen; vasoliniment*) is directed by the British Pharmaceutical Codex to be made as follows:

Liquid paraffin (liquid petrolatum).....	40 parts.
Oleic acid	40 parts.
Ammoniated alcohol (5%).....	20 parts.

Mix, and agitate until a clear solution results. The product is readily absorbed by the skin, and forms a useful vehicle for medicaments when it is desired that their action shall not be merely superficial.—(Nonproprietary.)

PAROGEN THICK (*parogen spissum*, B. P. C.) consists of hard paraffin 12 parts, liquid paraffin 48 parts, oleic acid 30 parts, ammoniated alcohol (10%) 10 parts. It is used as a very penetrable ointment base for endermic medication.

PAROLEIN is a pure liquid petrolatum containing from 1 to 5 per cent. of menthol and used in a special atomizer as an abortive of coryza.—Mfr.: C. Fr. Hausmann, St. Galen, Switzerland.

PAROTID GLAND has uses similar to those of the mammary and ovary; it has been employed in artificial menopause, intermenstrual pain and other conditions in which the ovary or corpus luteum is used.

PAS-AVENA is a liquid nerve sedative each fluidounce of which is said to represent 20 grains of passiflora, 10 grains of avena sativa, and 2 grains of anilipyrine (a substance "formed by the fusion of two molecules of antipyrine and one molecule of acetanilide"). Dose, a table-spoonful.—Mfrs.: Pas-Avena Chem. Co., New York.

PASSOLARIA is a vegetable nervine each fluidounce of which represents scutellaria 96 grains, passiflora 96 grains, and horsenettle 40 grains, with aromatics.—Mfrs.: Eli Lilly & Co., Indianapolis, Ind.

PASTERIN TABLETS, for use in whooping-cough, are said to consist of codeine, sodium salicylate, sodium bromide, and extract of elecampane.

PASTEURINE is a preparation of formaldehyde and boroglyceride. See caution under *formaldehyde*.

PAVYKOL TABLETS, used in diabetes, "contain the extracts of syzygium jambolanum, lappa, and herb of rhododendrum ferrugineum, besides lactic acid, tincture of iodine, salol and extract opium."—Mfrs.: Pharm.-Chem. Institute, Gernrode, Germany.

PEBECO is a potassium chlorate tooth paste made by P. Beiersdorf & Co., Hamburg, Germany; agts.: Lehn & Fink.

PECHO PASTILLEN are said to contain anesthesin, oil of eucalyptus and menthol with mucilaginous and other filling substances.

PECTAL TABLETS contain, according to Dr. Aufrecht, benzoic acid and terpin hydrate, together with sugar, some vegetable powder and traces of a violet coloring matter. They are used in hoarseness and other affections of the respiratory tract.—Mfr.: E. Cornelius, Strassburg, Germany.

PEDON is a preparation for preventing chafing and for diminishing excessive sweating of the feet. Its composition is unknown.—Mfr.: "Merkur," Biebrich, Germany.

PEDOTHEON is a malt extract medicated with hemato-gen, and exploited as a hematinic and nutrient.—Mfr.: Gustav Schroeder, Feuerbach, Germany.

PEGNIN is the rennin of calf's rennet, diluted with milk sugar and sodium chloride. It occurs as a fine, white powder, having a sweet, saline taste, and readily soluble in water. It is intended as an addition to milk, to render it more easily digestible, analogously to rennin.—Mfrs.: Meister, Lucius & Bruening, Hoechst-on-M.; agts.: V. Koechl & Co., New York.

PELAGIN is an elixir containing ether, antipyrin, caffeine and cocaine, used in seasickness.

PELLETIERINE TANNATE (official) is referred to here merely on account of the disparity in the dose-statements found in various works of reference. While some

authors give the dose as from one to a few grains, and the maximum dose as 8 grains, others more recently advise giving from 8 up to 24 grains at a dose. The *tannate* of pelletierine being almost insoluble in water, is probably not absorbed to any extent, and hence relatively non-toxic.

PELLITOL is an antiseptic ointment used in eczema and other skin diseases.—Mfrs.: Pitman-Myers Co., Indianapolis, Ind.

PELLOTINE is the alkaloid of the Mexican cactus *anhalonium Williamsii*, "pellote." It is marketed only as its *hydrochloride*, colorless crystals soluble in water. It is used as a hypnotic and narcotic. Dose, $\frac{2}{3}$ to $1\frac{1}{3}$ grains.—Mfrs.: Boehringer & Soehne, Mannheim, Germany; agts.: Merck & Co., New York.

PELOSINE is a synonym of *bebeerine*.

PEMZED is a mixture of milk sugar, calcium hypophosphate, and sodium chloride, intended as a nutrient addition to milk.—Mfr.: Alfred Schmidt, Basle, Switzerland.

PEPSIN, VEGETABLE.—See *papain*.

PEPSORTHIN is a combination of papain with magnesium peroxide, benzonaphthol and sodium bicarbonate, recommended by Dr. P. Rodari in gastric affections arising from insufficiency of hydrochloric acid and pepsin in the gastric juice.—Mfr.: Sauter's Laboratory, Geneva, Switzerland.

PEPTANNOL is an aromatized, vinous liquid, said to contain 2 per cent. of hydrochloric acid and 0.5 per cent. of tannin. It is exploited as a remedy in acute and chronic gastric catarrh, and as a prophylactic of gout and gouty affections.—Mfrs.: Drs. van Gember & Fehlhaber, Berlin-Weissensee, Germany.

PEPTENZYME is stated to combine the enzymes (ferments) of seven glands concerned in the digestive functions, and is hence prescribed as an all-round digestive. Dose, 3 to 10 grains.—Mfrs.: Reed & Carnrick, Jersey City, N. J.

PEPTO-BROM-EIGON and PEPTO-iodo-EIGON.—See under *eigons*.

PEPTOLACTINE is a preparation similar to the time-honored lactopeptine—consisting of pepsin, pancreatin, maltose, diastase and lactic and hydrochloric acids. Dose, 5 to 10 grains. Marketed also as tablets and elixir.—Mfrs.: Penn Pharm. Co., Philadelphia, Pa.

PEPTO-MEDULLIN, PEPTO-OVARIN and PEPTO-THYROIDIN, are peptonized extracts of bone marrow, ovary substance, and thyroid gland respectively, marketed in dry and syrupy forms.

PERAN is a frost-bite ointment said to consist of 1.5 per cent. of anesthesin, together with ichthyol, camphor, tannin and lanolin.—Mfr.: Alex. Müller, Bad Kreuznach, Germany.

PERBOLIN OINTMENT is said to consist of 4 parts of olive oil, 2 parts of wax, 2 parts of tallow, $\frac{1}{2}$ part of rosin, $\frac{1}{2}$ part of some unknown oil ("ol. col. am."), 1/10 part of rosemary oil and 1/100 part of bergamot oil. It is exploited as a remedy for ulcers and similar lesions.—Dr. Aug. Eppelsheim, Zwickau, Germany.

PERBORATE is a medicinal alkaline perborate in powder form, intended as a convenient means of making solutions of hydrogen peroxide extemporaneously as well as an antiseptic and bleaching constituent of tooth powders. When dissolved in water it is split up into hydrogen dioxide and borax; 14 grams of perborate dissolved in 100 c.c. of water yield a 10-volume solution of H_2O_2 .—Mfrs.: Roessler & Hasslacher Chem. Works, New York.

PERCALMIN is a syrup of thyme and eucalyptus, used in whooping cough and other affections of the respiratory tract. Dose, a teaspoonful to a tablespoonful.—Mfr.: Dr. Hy. Halle, Berlin N, Germany.

PERCO (*peru-cognac*) is described as a 1:40 solution of balsam of peru in cognac, advertised as a remedy for tuberculosis.—Mfrs.: Dallmann & Co., Gummersbach, Germany.

PERCOLL is a new form of adhesive plaster, in which the adhesive mass is spread on parchment instead of on linen or muslin. For use, the back of the plaster is moistened with water, which gives it pliability; on drying, it becomes stiff again.—Mfrs.: Chem. Fabrik "Helfenberg," Helfenberg, Germany; agts.: C. Reinschild Co., New York.

PERCUTILAN is the name given to a readily absorbed ointment base. It forms the base of prevalidin.—Mfrs.: Wollwäscherei und Kämmerei, Döhren, Germany.

PERDYNAMIN is Dr. Theuer's *hemoglobiñ albuminate*, prescribed as a "blood-builder."—Mfr.: H. Barkowski, Berlin O, Germany.

PERGENOL, a so-called "solid peroxide of hydrogen," is said to be a mixture of sodium perborate and sodium bitartrate, forming when dissolved in water hydrogen dioxide, boric acid and neutral sodium tartrate.—Mfr.: Dr. Hy. Byk, Charlottenburg, Germany.

PERGLUTYL is a solid form of hydrogen peroxide, obtained by dissolving in solution of hydrogen dioxide at a gentle heat sufficient gelatin to yield on cooling a solid mass after the previous addition of a little glycerin. It is intended for internal as well as external use as a disinfectant and antizymotic.—Mfrs.: Drs. R. Boehm & H. Leyden, Berlin, Germany.

PERHYDROL is a 30 per cent. (by weight) solution of hydrogen peroxide, claimed to be chemically pure and free from acid. Its medical uses are the same as the official (3 per cent.) solution.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

PERIPLOCIN, $C_{20}H_{48}O_{12}$, is a glucoside obtained from *periploca græca*. It occurs as a whitish to yellow powder or crystals, soluble in water and alcohol, slightly soluble in ether. It was introduced a few years ago as a cardiac tonic, especially for subcutaneous use—1/60 grain dissolved in physiological salt solution once daily or every second day.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

PERISTALTIN is a trade name for a glucoside obtained from *cascara sagrada*, $C_{14}H_{18}O_8$. It is easily soluble in water and diluted alcohol; difficultly soluble in absolute alcohol. It is employed as a laxative.

PERMAGNODAT is a *magnesium perborate* containing from 8 to 9 per cent. of active oxygen. It is used as a wound disinfectant.—Mfrs.: Chem. Fabrik, Coswig-Anhalt, Germany.

PEROGEN (*oxygen bath salt*) is a preparation consisting of a catalyzer and sodium perborate capable of yielding 10 per cent. of oxygen, the two substances being wrapped separately. The catalyzer is a light-yellow, odorless powder, a medicinally indifferent substance. The oxygen bath produced is said to reduce blood pressure and the pulse rate much more than the ordinary bath. It is said to be useful in cardiac affections, neuroses, insomnia, etc. Dose, one bath daily.—Mfrs.: Morgenstern & Co., New York.

PERONIN is the arbitrary name given to *benzyl-morphine hydrochloride*, $C_{17}H_{19}NO_3 \cdot O \cdot CH_2 \cdot C_6H_5 \cdot HCl$, a white, bitter powder, soluble in water and diluted alcohol, introduced as a substitute for morphine but latterly largely superseded by heroin (diacetyl-morphine) and dionin (ethyl-morphine hydrochloride). Dose, $\frac{1}{4}$ to $\frac{3}{4}$ grain.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

PEROXOLS are 3 per cent. hydrogen peroxide solutions containing in addition 1 per cent. of camphor, menthol, thymol or other disinfectants, respectively, in alcoholic solution. See *camphoroxol*, *menthoxol*, and *thymoxol*.—Mfr.: C. Raspe, Weissensee, Germany; agts.: C. Bischoff & Co., New York.

PEROXYDOL is the name applied to a medicinal grade of *sodium perborate*, especially intended for making medicinal and cosmetic preparations liberating hydrogen dioxide.—Mfrs.: Kirchhoff & Neirath, Berlin N, Germany.

PEROXYDOL CREAM is intended for use in the chafing common with infants and in other cutaneous lesions. It is said to consist of lycopodium, zinc oxide, balsam of peru and lanolin, with a small percentage of hemomelidin.

PEROXYGENOL is said to be a 30 per cent. solution of hydrogen dioxide.

PERSODINE is the name applied to a 1:75 solution of *sodium persulphate*, $Na_2S_2O_8$. It is used chiefly as an in-

ternal antiseptic and oxidizer, in tuberculosis, cancer, etc. Dose, a tablespoonful in water before the two principal meals.—Mfr.: "Lumiere," Lyons, France.

PERTUSSIN (*extractum thymi saccharatum*) is defined as a sweetened compound fluid extract of thyme (1:7) containing also $\frac{1}{2}$ per cent. of potassium bromide. Some say it contains no bromide. As its name indicates, it is a whooping-cough remedy. Dose (children), a small teaspoonful to a tablespoonful, according to age, four times a day.—Mfr.: Apotheker Taeschner, Berlin C; agts.: Lehn & Fink, New York.

PERTUSSOL is the name applied to compound pastilles of aristoquin (aristoquinine), extolled specifically as a remedy in whooping-cough.

PERU-COGNAC. See *perco*.

PERU-ESTON and **PERU-FORMESTON.**—See under *eston*.

PERUGEN is synthetic *balsam of peru*.—Mfrs.: Evers Bros., Düsseldorf, Germany.

PERU-LENICET.—See under *lenicet*.

PERULIN is a wound ointment consisting of zinc oxide 2 parts, liquid petrolatum 5 parts, japan wax 1 part, peru balsam 1 part, lead acetate 1 part, carbolic acid 1 part and wool-fat 15 parts.—Mfr.: G. Pflug, Zittau, Germany.

PERUOL is a 25 per cent. solution of peruscabin in castor oil, used as a paint in scabies. Marketed also as soap, containing 40 per cent. of peruol.—Mfrs.: Akt-Ges. für Anilin-fabrikation, Berlin SO, Germany; agts.: Lehn & Fink, New York.

PERUSCABIN is synthetic *benzoic acid benzyl ester*; a nearly colorless liquid, of peculiar not exactly disagreeable odor, and soluble in alcohol and ether; specific gravity 1.12. It is used in scabies and other parasitic skin diseases, in oily solution—generally as peruol.—Mfrs.: Akt-Ges. für Anilin-fabrikation, Berlin SO, Germany; agts.: Lehn & Fink, New York.

PERVACUATA-CLOEDT are concentrated infusions and decoctions.

PESOTTA PILLS are reported to contain potassium ovoelinate prepared by saponification of the fat contained in yolk of egg. They are especially designed as a remedy for heartburn. Dose, 1 to 3 pills, as required.

PETRO-CREOSOTE is not a kind of creosote but a combination of petrolatum, beechwood creosote, gentian tincture and sherry wine, used in pulmonary affections.—Mfrs.: Campbell Pharm. Co., Philadelphia, Pa.

PETROGEN is a "modified mineral oil" readily emulsifying with water and said to be possessed of great penetrating power when applied to the skin. It is used as a *vehicle and solvent* for iodine, creosote, iodoform, gualacol,

menthol, etc., analogously to vasogen, and is marketed combined with these drugs. Its combinations are used topically to produce the constitutional effects of the drugs they contain.—Mfrs.: John Wyeth & Bro., Philadelphia, Pa.

PETROLAN.—See *petrosapol*.

PETROLINE is "an odorless, colorless fluid obtained from the fat of the wool of sheep [lanolin] and petroleum." *Petroline compound* is a spray for nose and throat, containing, dissolved in petroline, camphor, hydrastine hydrochloride, menthol, eucalyptol, thymol, oil of wintergreen, cocaine, and sanguinarine nitrate.

PETROMOL is another of the many preparations claimed to be the same as ichthyol.—Marketed by Lehn & Fink, New York.

PETRONOL is "a pure hydrocarbon oil," probably liquid petrolatum.—Eli Lilly & Co., Indianapolis, Ind.

PETROSAPOL or *petrolan* is a saponified petroleum residue, of brown color and ointment consistency, odorless, and intended as an ointment base of high melting-point (90°C.), which enables medicaments incorporated with it to form a lasting coating on the skin; also as a succedaneum for naftalan.—Mfrs.: G. Hell & Co., Troppau, Austria.

PETROSOL is a petroleum-cresol soap employed in $\frac{1}{2}$ to 1 per cent. solution as a disinfectant, as well as an insecticide.—Mfr.: H. Noerdlinger, Flörsheim, Germany.

PETROSULFOL is Austrian ichthyol (*ichthyolum austriacum*).—Mfrs.: G. Hell & Co., Troppau, Austria.

PETROSULFOL, ALBUMINATED, is an Austrian analogue of *ichthalbin*.

PETROVASOL is a substitute for ichthyol-vasogen, containing 10 per cent. of petrosulfol and 90 per cent. of liquid vasol. It is employed locally in various inflammatory processes.—Mfrs.: G. Hell & Co., Troppau, Austria.

PETROVASOL SALICYLATED.—See *rheumasol*.

PETROX is a mixture of paraffin oil (4), oleic acid (2) and spirit of ammonia (1), intended as a substitute for vasogen in dermic medication.

PHAGOCYTIN, according to Dr. F. Zernik, as formerly marketed, consisted of an organic compound of arsenic. The preparation as now offered is said by the manufacturers to be a sterile solution of sodium nucleinate.—Mfr.: Hugo Rosenberg, Berlin W, Germany.

PHASELIN is defined as "the active principle of the bean of dikos mexicano," suggested as a digestant active alike in alkaline or acid media—analogue to papain. *Dose*, 3 to 10 grains.—Mfrs.: Alta Pharm. Co., St. Louis, Mo.

PHECINE forms a white, odorless powder, soluble in water and alcohol. It is prescribed as an antiseptic astringent, largely in skin diseases. (It has been claimed that this is not a homogeneous chemical, but a mixture of resorcin and zinc sulphocarbolate.)—Mfrs.: German Chem. Co., Chicago, Ill.

PHENACETIN-URETHANE. See *thermodin*.

PHENACODINE is what Dr. Fuchs calls a migraine tablet containing phenacetin ($7\frac{1}{2}$ grains), caffeine, codeine and guarana.—Mfr.: Dr. W. Natterer, Munich, Germany.

PHENALEIN is a laxative preparation the basis of which is phenolphthalein.—Mfrs.: Pax Chem. Co., Chicago, Ill.

PHENALGIN ("*ammoniated phenylacetamide*") (phenylacetamide being acetanilid), occurs as a white powder of slightly pungent odor but non-pronounced taste, and nearly insoluble in water. According to analyses made at the instigation of the American Medical Association, it is "a mixture containing the following ingredients approximately in the proportions given: acetanilid 57 parts, sodium bicarbonate 29 parts and ammonium carbonate 10 parts. Certain packages of phenalgin were purchased, which on analysis did not show ammonium carbonate." Its action is that of acetanilid—antipyretic and antineuralgic. Dose, 5 to 20 grains, usually as tablets ($2\frac{1}{2}$ grains) or capsules (5 grains).—Mfrs.: Etna Chem. Co., New York.

PHENALIN (not to be confounded with phenolin) is the name applied to tablets each containing 0.05 gram of phenolphthalein and having laxative action. Dose, 1 to 4 or more.—Mfr.: Karl Engelhard, Frankfort-on-M., Germany.

PHENAMINE—See *phenocoll hydrochloride*.

PHENANDYNE is described as "a nonirritating and nonescharotic preparation of phenol," used as an antiseptic and disinfectant, chiefly in dental practice.—Mfrs.: Schiefel & Co., New York.

PHENATOL is a composite antipyretic and antineuralgic, consisting, according to some reports, essentially of acetanilid, caffeine and potassium tartrate; according to others, it is composed of acetanilid, caffeine, sodium bicarbonate, sodium sulphate, sodium chloride and succinic acid. Dose, 5 to 20 grains.—Mfrs.: Phenatol Chem. Co., New York.

PHENAZONE is the B. P. name for *antipyrin*.

PHENETIDIN AMIDO-ACETO-HYDROCHLORIDE occurs as white crystals soluble in 16 parts of water. It is brought forward as an antipyretic.—Mfr.: Dr. A. Vossinkel, Berlin W, Germany.

PHENETIDIN AMYGDALATE or **MANDELATE**.—See *amygdophenin*.

PHENETIDIN CITRATE.—See *citrophen*.

PHENETIDIN QUININE-CARBONIC-ACID ESTER is described under *chinaphenin*, its trade name.

PHENETIDIN TARTRATE will be referred to under *tartrophen*. Also known as *vinopyrine*.

PHENOBROMATE is a mixture of acetanilid, sodium bromide and milk sugar, marketed as powders weighing about 14 grains each. It is exploited as an analgesic and sedative, in nervous headache, dysmenorrhea, etc.—Mfrs.: Feno. Chem. Co., New York.

PHENOCOLL ACETYLSALICYLATE.—See *aspirophen*.

PHENOCOLL HYDROCHLORIDE (*amido-acet-para-phenetidin* or *glycocol-phenetidin hydrochloride*; *phenamine*), $C_6H_4(OC_2H_5)(NH.CO.CH_2.NH_2).HCl$, is a white, crystalline powder, of sweetish-bitter taste, soluble in alcohol and in about 16 parts of water. It is used as an antipyretic and antimalarial. Dose, 5 to 20 grains; hypodermically, 4 to 8 grains. Incompatible with alkalis and their carbonates, ferric chloride, and piperazin.—Mfrs.: E. Schering, Berlin; agts.: Lehn & Fink, New York.

PHENOCOLL SALICYLATE, also known as *salocoll*, forms fine, white needles, having a sweetish taste, soluble in about 200 parts of water, more freely soluble in alcohol. It is used as an antirheumatic and analgesic, like the salicylates. Dose, 10 to 20 grains several times daily.

PHENOLACTIN is a synonym of *lactophenin*.

PHENOL-BISMUTH (*bismuth carbolate*) is a white, neutral, non-caustic powder, of slight odor and taste, containing 80 per cent. of bismuth oxide and 20 per cent. of phenol. It is employed as a gastro-intestinal disinfectant. Dose, 5 to 15 grains, several times daily.—Mfrs.: Heyden Chem. Works, Radebeul, Germany; agts.: Schering & Glatz, New York.

PHENOLID is an antipyretic and analgesic consisting, according to reports, of equal parts of acetanilid and sodium bicarbonate. Dose, 5 to 10 grains.

PHENOLPHTHALEIN (*dioxyphthalophenone*, *dioxydiphenylphthalide*, *paraphthalein*), $C_{20}H_{14}O_4$, is produced by the interaction of phenol and phthalic anhydride. It occurs as a yellowish-white or grayish-white, odorless, tasteless powder, soluble in 10 parts of alcohol and in about 600 parts of water. Its solutions are colorless and remain so if added to neutral or acid liquids, but if added to solutions of alkali hydroxides or carbonates they produce a red color. For many years the only use of phenolphthalein was as an indicator in chemical reactions. In 1901, however, Dr. von Vamossy, of the Pharmaceutical Institute at Budapest (Hungary), called attention to the *laxative* effect of the drug; and since then it has been exploited under a variety of proprietary names, a number of which will be referred to below. It is said that not much of the

chemical is absorbed, and what does enter the system is excreted by the kidneys without producing renal irritation; the greater part of it is eliminated unchanged with the feces; it does not appear to be toxic. Dose, $1\frac{1}{2}$ to 5 grains; children $\frac{3}{4}$ to $1\frac{1}{2}$ grain.—Among the proprietary preparations containing phenolphthalein as their base are: *Exurgine*, *Fenolaxa*, *Lazaphen Aperitol*, *Eulaxans*, *Laxothalen*, *Novalax*, *Phenalein*, *Phenolax*, *Phenolphthalein Laxative*, *Probilin*, *Prunoids*, *Purgen*, *Thalosen*, and *Verocolate*. These are briefly alluded to under their respective titles.

PHENOL SODIQUE is a black, strongly alkaline liquid, having a cresol-like odor and specific gravity 1.011 to 1.014. No carbon dioxide is set free on addition of acids. On evaporation and ignition a residue remains which contains sodium. The product gives the characteristic reactions of phenols; on evaporation a tarry residue remains. The product thus seems to be analogous to the National Formulary *solution of sodium carbolate*. It is exploited as an antiseptic and disinfectant.—Mfrs.: Hance Bros. & White, Philadelphia, Pa.

PHENOL-TETRACHLORPHTHALEIN is a derivative of phenolphthalein, recommended as a subcutaneous purgative.

PHENOL TRICHLORIDE.—See *omal*.

PHENOPAST is a preparation consisting of 50 per cent. of carbolic acid and a neutral soap. It is of ointment consistency, and used as a disinfectant of the hands, etc.—Mfr.: C. F. Hausmann, St. Galen, Switzerland.

PHENOPYRIN (*antipyrin carbolate*) is a compound of 1 part of phenol and 2 parts of antipyrin; an oily, colorless and odorless liquid, soluble in alcohol and ether, but insoluble in water. It is used chiefly externally, as an anodyne; internally as an antiseptic. Dose, 3 to 15 grains.—(Nonproprietary.)

PHENOSAL (*para-phenetidin salicyl-acetate*) occurs as a white powder, having a sour-bitter taste, and sparingly soluble in water, alcohol and ether. It has antipyretic and antineuralgic action. Dose, 5 to 15 grains several times daily, in powders or tablets.—Mfrs.: Dr. Hofmann Nachf., Meerane, Saxony; agts.: Lehn & Fink, New York.

PHENOSALYL (*saliphenol*) is a composite antiseptic in vogue in France but no longer on the American market. Various formulas have been given for it, the most generally accepted one being: carbolic acid (90), salicylic acid (10), lactic acid (20), and menthol (1), mixed by the aid of heat. It is used mostly in $\frac{1}{2}$ to 1 per cent. solutions.—Mfrs.: Meister, Lucius & Brünig, Hoechst, Germany; agts.: V. Koechl & Co., New York.

PHENOSTAL (*phenoster*) is the trade name adopted for the "carbolic acid tablets" described as consisting of di-

phenyloxalic ether.—Mfrs.: Schülke & Mayr, Hamburg, Germany; agts.: Lehn & Fink, New York.

PHENOSUCCIN.—See *pyrantin*.

PHENYFORM is a condensation product of phenol and formaldehyde. It occurs as a grayish, odorless powder soluble in alcohol and alkali solutions, but insoluble in water and ether. It is used as a wound antiseptic and cicatrizing. It should be noted that the use of formaldehyde compounds involves a possibility of bad effect on eyesight. See caution under formaldehyde.—Mfrs.: Chem. Industrie "Pallas," Schöneberg, Germany.

PHENYL ACETYL SALICYLATE is a chemical synonym of *vesipyrine* or *acetylsalol*.

PHENYL-BENZAMID.—See *benzanilid*.

PHENYLDIHYDROQUINAZOLINE TANNATE. See *orexine*.

PHENYL-DIMETHYL-PYRAZOLON is a chemical synonym of *antipyrin*.

PHENYL-ETHYL-URETHANE and PHENYL-ETHYL CARBAMATE are synonymous terms for the product marketed as *euphorine*.

PHENYL-METHYL-KETONE.—See *hyponne*.

PHENYLON is one of the numerous synonyms of *antipyrin*.

PHENYL SALICYLATE is the official name for *salol*.

PHENYL-URETHANE.—See *euphorine*.

PHENYPHRIN is a dental local anesthetic consisting of physiological solution of salt containing in each cubic centimeter 0.02 gram of alypin and 0.1 gram of 1:1000 solution of suprarenin.—Mfr.: Bernhard, Hadra, Berlin, Germany.

PHENZOLINE is a synonym of *cedrarine* and *orexine*.

PHENZOLINE HYDROCHLORIDE is an English name for the article known as *orexine hydrochloride*.

PHENZOLINE TANNATE is an English name for the article known on this continent and in Germany as *orexine tannate*.

PHEROSTEN is described as a meat juice containing 40 per cent. of albumin. It is used as a nutrient.

PHESIN (not phesine) is a sulpho derivative of phenacetin, of the formula $C_6H_5.O.C_6H_5.SO_3Na.NH.CO.CH_3$; a reddish-brown, odorless powder, of slightly pungent and salty taste, readily soluble in water, and prescribed as an antipyretic and antineuralgic. Dose, $7\frac{1}{2}$ to 15 grains. The article is not on this market.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle, (Switzerland) and New York.

PHILANTHROPIN is reported to contain iron pyrophosphate and calcium phosphate. It is used in anemia and chlorosis.

PHILORAL is the name adopted for throat pastilles consisting essentially of suprarenal gland substance, anesthesin and coffee extract, and used in painful affections of the throat.—Mfr.: A. Freund, Frankfort-on-M., Germany.

PHILORAL THROAT PASTILLES are said to contain suprarenal glands and anesthesin with acacia, etc.

PHENIXIN is the fanciful name recently applied to carbon tetrachloride, the drug being employed as a local anesthetic in neuralgias, etc., and also largely exploited as a noninflammable substitute for benzin as a cleansing agent.

PHORISON is a new name adopted for *phosidin*, a substance originally introduced under the name of *ferrosin*.

PHORXAL is a nutritive preparation made from blood; a fine, odorless, tasteless powder, soluble in aqueous liquids. It contains 0.25 per cent. of phosphorus, 0.63 per cent. of ferric oxide, and 87.5 per cent. of albumin. Dose, $\frac{1}{2}$ to 1 ounce daily, with soup, warm milk, etc.—Mfrs.: Fritz-Petzoldt & Süss, Vienna, Austria.

PHOSFERROL is a "blood and nerve tonic," each fluid ounce of which represents 2 drams of cod liver oil, extract of malt, 8 grains of calcium glycerophosphate, 4 grains each of sodium and potassium glycerinophosphate, 2 grains of organic iron, $\frac{1}{20}$ grain of strychnine nitrate, and aromatics. Dose, 2 drams three times daily.—Mfr.: E. T. Hitchcock, Chicago, Ill.

PHOSIDIN is a new name for the article described under the name of *ferrosin*.

PHOSIRON is the "neutral salt of the complex phosphortartrate, containing 19 per cent. of iron and 6.5 per cent. of phosphorus." It is odorless and tasteless, slightly asoluble in water but readily soluble in alkalis. It is offered as a hematinic and nerve reconstructive, and is supplied in 1-gram (15-grain) tablets with chocolate and sugar, each containing 0.05 gram of iron.—Mfr.: Dr. Carl Sorger, Frankfort-on-M., Germany; agts.: C. Bischoff & Co., New York.

PHOSOTE (*phosphote, creosote phosphate*), is defined as the phosphoric acid ester of creosote. It occurs as a nearly colorless, syrupy, heavy liquid, of faint creosote odor and taste, and containing about 80 per cent. of creosote and 20 per cent. of phosphoric anhydride. It is prescribed in tuberculosis, etc., instead of creosote, usually hypodermically—15 to 45 minims daily—sometimes per os in capsules (up to 90 minims per day).—Mfrs.: Lamblatte Frères, Paris, France.

PHOSPHACID, exploited for hypodermic injection in the treatment of tuberculosis, syphilis and lepra, is a solution of various oxidation products of phosphorus.

PHOSPHAGON is a liquid nerve nutrient and restorative, "each fluid ounce of which represents alcohol 16 per

cent., compound glycerophosphates 24 grains, cerebro-medullary extract (bovine) 20 grains, phytophosphates 20 grains, and tincture nux vomica 16 minims." Dose, 1 to 2 teaspoonfuls three times daily.—Mfrs.: Arlington Chem. Co., Yonkers, N. Y.

PHOSPHATINE (Dr. Roth) is an infant food containing, according to Dr. Aufrecht, 6.27 per cent. of moisture, 15.72 per cent. of nitrogenous substances (12.55 per cent. digestible), 9.78 per cent. of fat, 49.51 per cent. of sugar, 14.29 per cent. of starch, 0.8 per cent. of cellulose and 3.63 per cent. of mineral matter (1.9 per cent. of phosphoric acid and 0.81 per cent. of lime).—Mfrs.: Henn & Kittler, Strassburg, Alsace.

PHOSPHATOL.—See *phosphotal*.

PHOSPHERGOT is the name Dr. Bellot applies to a mixture of equal parts of dried sodium phosphate and powdered ergot, which he recommends in neurasthenia and general weakness.—Mfr.: Gustav Meyer, Bismarck, Germany.

PHOSPHO-ALBUMIN is a complex organic product prepared from the testicles, brain and spinal cord of young bulls. Its active constituents are lecithin, spermine and nuclein. It is employed as a "nerve tonic." Dose, a tablespoonful of the liquid, or 1 tablet (5-grain), after meals.

PHOSPHO-GUAIACOL.—See *guaiacophosphal*.

PHOSPHO-NUCLEIN is a product analogous to phosphoalbumin, marketed as 5-grain tablets and in combinations.—Mfrs.: Phosphonuclein Chem. Co., Lexington, Ky.

PHOSPHORIN is the name given to chocolate pastilles each containing 1/250 grain of phosphorus.—Mfr.: F. Reichelt, Breslau, Germany.

PHOSPHOROL is a phosphorus confection that does not dry up and is otherwise permanent, it is claimed.

PHOSPHORUS IODIPIN. See *iodipin phosphorized*.

PHOSPHOTAL (*phosphotal*) is described as the phosphorous acid ester of creosote, occurring as a thick, reddish-yellow, oily liquid, of creosote odor and pungent taste, soluble in alcohol, chloroform, oils, and glycerin, and containing 90½ per cent. of creosote. It is used in phthisis, etc., instead of creosote. Dose, 3 to 15 minims three times a day, in milk, jelly, cod liver oil emulsion, etc.—Mfrs.: Fries Bros., New York.

PHOSRACHIT is a phosphoretted cod liver oil preserved by the addition of 1 per cent. of limonene and containing 0.01 per cent. of phosphorus.—Mfrs. Korte & Co., Hamburg, Germany.

PHTHISIN TABLETS contain 0.27 gram of fresh bronchial gland substance and are employed in various diseases of the lungs.

PHTHISOCAN is a substitute for *sirolin* (syrup of thiocol), a solution of potassium-guaiacolsulphonate in syrup of orange reinforced by tincture of bitter-orange peel. Dose, one to two teaspoonfuls.—Mfr.: Herman Cohn, Wilmersdorf, Germany.

PHTHISOPYRINE is a tablet containing aspirin (0.1 gram), sodium arsenite (0.00025 gram), and camphoric acid (0.1 gram), used as an antipyretic and antidiaphoretic in phthisis. Dose, 2 to 8 tablets two to four times a day, after meals, in cold milk or lemonade; alkaline beverages should be avoided.—Mfrs.: Simon's Apotheke, Berlin C, Germany.

PHTHISOREMID is a mixture of new tuberculin and an indifferent oil, marketed in capsules and used in phthisis. A "weak" and a "strong" are differentiated.—Mfrs.: Dr. H. Müller & Cie., Berlin C, Germany.

PHYMOCHROM (*thymochrom*) is an arsenical preparation of the thymus gland, used internally in cutaneous affections.

PHYSIOLOGICAL NUTRITIVE SALT or **BLOOD SALT** is what Naegeli calls a mixture of potassium chloride, phosphate and sulphate; sodium phosphate, chloride, and carbonate; calcium phosphate and fluoride; magnesium sulphate; manganese sulphate; iron sulphate and phosphate and sillicic acid—all in the proportions in which they exist in the blood. It is marketed only in 0.1 gram tablets, and is used chiefly in arterial sclerosis. Dose, 2 or 3 tablets per day.—Mfr.: C. F. Hausmann, St. Gallen, Switzerland; agt.: Ernst Bischoff & Co., New York.

PHYSOL (*physiological solvent*) is, according to M. I. Wilbert, an efficacious and stable pepsin solution, consisting of pepsin (50), menthol (0.5), eucalyptol (0.5), oil of wintergreen (0.5), alcohol (10), glycerin (50), diluted hydrochloric acid (20), and distilled water (to make 1000).—(Nonproprietary.)

PHYSOSTIGMINE SULPHITE (not *sulphate*), $C_{15}H_{21}N_2O_2 \cdot H_2SO_3$, is a white, apparently amorphous powder soluble in water and in alcohol. Its solutions keep for weeks without turning red, and it is therefore offered as a succedaneum for eserine sulphate and salicylate, particularly in eye practice.—Mfr.: E. Merck, Darmstadt; agts.: Merck & Co., New York.

PHYSOSTOEL is a German name for *eserine oil*, a 1 per cent. sterilized solution of physostigmine alkaloid in olive oil, used as a myotic.—Mfrs.: J. D. Riedel Co., Berlin (Germany) and New York.

PHYTALBUMOSE is a synonym of *abrin*.

PHYTIN is described as the calcium and magnesium double salt of anhydro-oxymethylene-diphosphoric acid, occurring in the seeds of various plants; a white, odorless, nearly tasteless powder, containing 22.8 per cent. of phos-

phorus and soluble in water. It is prescribed as a nerve and bone nutrient in children. It is marketed as 0.25 gram capsules, 4 of which constitute the adult daily dose; 1 to 2 that for children.—Mfrs.: Ges. für Chem. Industrie, Basle, Switzerland; agt.: T. D. Webb, New York.

PHYTOROIDES are tablets each containing dried thyroid gland 1 grain, poke berries $\frac{1}{2}$ grain; bladder-wrack, pancreatin and gualacol carbonate of each 1 grain. They are exploited as an obesity remedy. Dose, 2 tablets after meals.—Mfrs.: Phospho-Albumen Co., Chicago, Ill.

PICRATOL (*silver picrate; silver trinitrophenolate*), $C_6H_2O(NO_2)_3Ag + H_2O$, is a yellow, flocculent substance, containing 30 per cent. of silver, soluble in 50 parts of water and 60 of alcohol, and also soluble in glycerin, ether, or chloroform. It is used, like argyrol, protargol, and the other recent organic compounds of silver, in gonorrhea, eye disease, nose and throat troubles, etc.; mostly in $\frac{1}{2}$ to 2 per cent. solutions.—Mfrs.: John Wyeth & Bro., Philadelphia, Pa.

PICROL is chemically *potassium diiodo-resorcin monosulphonate*, $C_6H_2(OH)_2SO_3K$, and occurs as a white odorless bitter powder, soluble in water and glycerin, and containing 52 per cent. of iodine. It is an external antiseptic, analogous to sozoiodole.

PICROPYRIN is *antipyrin picrate*, a compound of 118 parts of antipyrin with 229 parts of picric acid.

PICROTOXIN (*cocculin*), $C_{28}H_{20}O_{10}$, is a neutral principle obtained from *cocculus indicus* (fish berries). It occurs as colorless, odorless, bitter crystals, soluble in about 330 parts of water and 10 parts of alcohol. It has been used as an antihydrotic, antispasmodic and stomachic, in doses of 1/100 to 1/30 grain. Latterly it has been recommended as a means of preventing post-anesthetic vomiting following chloroform anesthesia. For this purpose 15 minims of a 0.2 per cent. solution are injected hypodermically shortly before the operation; should vomiting nevertheless set in, the injection is repeated, half the dose being used.—(Nonproprietary.)

PIJOKREO and PIZIKERO.—See under *nebulates*.

PILOCARPINE CARBOLATE OR PHENYLATE.—See *aseptolin*.

PILOCARPINUM COMPOSITUM is what Carossa calls tablets containing $\frac{1}{2}$ milligram of pilocarpine hydrochloride together with adjuvants and drugs reducing the reflexes. It is intended to be used in phthisis during the incipient stage. Dose, 1 to 3 tablets several times daily.—Mfr.: Ludwigs-Apotheke, Munich, Germany.

PINEDOL is an insomnia remedy of undivulged composition.—Mfrs.: Pinedol Co., New York.

PINESYL is an English antiseptic and disinfectant making an emulsion with water and in other respects similar to creolin.

PINOCAPSIN is a rubefacient embrocation representing 10 per cent. each of oil of pine needles and concentrated ammonia water, 20 per cent. of capsicum, 50 per cent. of wood alcohol (!), 5 per cent. of ether, 3 per cent. of camphor and 2 per cent. of ethereal oils added as perfume. This seems to be a dangerous preparation, owing to the possible toxic effect of the wood alcohol, which has been known to produce blindness even on external application or technical use.—Mfrs.: Chem. Fabrik in Falkenberg-Grünau, Germany.

PINOL is the name applied to an oil obtained from the resin of *pinus austriaca*. It possesses a mild invigorating resinous odor. It is employed mainly for the so-called "disinfection" of chicken coops and the annihilation of vermin on fowls.—Mfr.: J. Mack, Reichenhall, Germany. (This article should not be confounded with the pinol on this market for years, representing the ethereal oil of *pinus pumilio*.)

PIPERAZIN (*diethylene-diamine*; *pyrazin hexahydride*; *piperazidin*; *ethylene-imine*), $C_4H_{10}N_2 + 6H_2O$, results from the action of ammonia upon ethylene chloride. It occurs as colorless, hygroscopic crystals, very freely soluble in water, less readily in alcohol. It is employed as a supposed solvent of uric acid in gouty conditions. Dose, 15 to 30 grains per day, in water. It should be kept well stoppered and in a dry place, as it readily absorbs moisture and carbonic acid from the atmosphere. It precipitates many alkaloids from solutions of their salts, owing to its alkalinity. This may be avoided by first neutralizing the drug in solution. Marketed also as water (15 grains in a quart) and as 1-gram tablets (10 in a tube).—Mfrs.: E. Schering, Berlin; agts.: Lehn & Fink, New York, and Farbenfabriken of Elberfeld Co., New York.

PIPERAZIN ICHTHYOLSULPHONATE.—See *ichthyolidin*.

PIPERAZIN QUINATE (or *chinate*) is the chemical designation for *sidonal*; see this title.

PIPERAZIN SALICYLATE is a chemical compound of 1 molecule of piperazin with 2 molecules of salicylic acid. It is soluble in water, alcohol or ether, and is offered as a gout and rheumatism remedy. Dose, 5 to 15 grains.

PIPERAZIN SULPHOICHTHYOLATE is described under its trade name, *ichthyolidin*.

PIPERIDIN BITARTRATE is intended as a uric acid solvent. Dose, 10 to 15 grains three times daily.

PIPERIDIN GUAIACOLATE.—See *guaiaperol*.

PIPUMIOL is what a Dresden firm calls Tyrolese oil of *pinus pumilio*.—Mfrs.: Marien-Apotheke, Dresden A, Germany.

PIRAL is *pyrogallic acid* in crystals.

PISCAROL. See *ichden*.

PISCIN is a substitute for cod-liver oil used abroad by homeopathic physicians.—Mfr.: Dr. Mauch, 'Göppinger, Germany.

PITRAL is the name under which the neutral portion of pine wood tar is marketed. It possesses the same properties as the latter, but, it is claimed, does not produce disagreeable by-effects.

PITYLEN (*pix methylenata*) is defined as a condensation product of pine tar and formaldehyde. It occurs as a brown powder of pronounced tarry odor, and readily soluble in alkaline solutions, alcohol, chloroform or collodion. It is employed in the treatment of eczema and parasitic cutaneous diseases. See caution under *formaldehyde*.—Mfrs.: Chem. Laboratorium Lingner, Dresden, Germany.

PITUITARY GLAND, the infundibular portion, has been tried in cardiac debility and as a diuretic, also in acromegaly and debility arising from functional disturbances. The dried substance is given in doses of 1 to 4 grains, in powders or tablets.

PITUITRIN is a dried extract of the infundibular portion of the pituitary gland. It has vaso-constrictive action like the suprarenal gland, and heart stimulant and diuretic effects like digitalis or strophanthus.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

PIXAVON is an odorless liquid tar soap recommended as a scalp wash to prevent baldness of parasitic origin.—Mfr.: Lingner, Dresden, Germany.

PIX-CRESOL is defined as "a salt obtained either from tar or gualacol; $C_6H_7N.SO$; non-toxic, non-volatile; a powerful deodorizer, and medicinal antiseptic."—Mfrs.: Pix-Cresol Chem. Co., Kansas City, Mo.

PIX METHYLENATE.—See *pitylen*.

PIXOL is a mixture of 3 parts of wood tar, 1 of potash soap and 3 of 10 per cent. potassa solution; a clear, thick, dark-brown liquid miscible with water. It is used as a disinfectant, in 2 to 5 per cent. solutions.

PIXOSAPOL is a liquid tar soap made by Schlimpert & Co., Leipsic-Reudnitz I, Germany.

PIX SOLUBILIS is a water-soluble tar obtained from wood tar by treatment with sulphuric acid and subsequent neutralization with sodium hydroxide. It is used as a substitute for regular tar in skin diseases.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

PLANTACID is an effervescent salt containing an alkali citrate. *Plantacid-casein alkali* is a dietetic nutritive salt containing about 78 per cent. of protein.—Mfr.: Dr. H. Brackebusch, Berlin, Germany.

PLANTAL, the recently introduced "plant alkali" recommended in diabetes, enlarged liver, gallstone disease, etc., consists, according to J. Kochs, of a mixture of so-

dium bicarbonate, sodium sulphate, potassium bitartrate, tartaric acid, citric acid and salt.—Mfr.: Dr. H. Brakebusch, Berlin, Germany.

PLANTAN is a mixture of paraformaldehyde and powdered charcoal, meant to be ignited for the generation of formaldehyde gas for general disinfectant purposes.

PLANTOSE is plant albumin derived from rape seed; light-yellow, tasteless powder containing 12 to 13 per cent. of nitrogen and insoluble in water. It is used as a nutrient, in quantities of 1 to 3 ounces per day.

PLASMENT is a mucilage prepared from Irish and Iceland mosses, with the addition of glycerin and benzoïn, and intended as a vehicle for urethral injections.

PLASMODYNE is an antiseptic poultice material on the order of the official cataplasm of kaolin. It is intended as a substitute for the old-fashioned flaxseed poultice, in congestive and inflammatory conditions.—Mfrs.: McKesson & Robbins, New York.

PLASMON, also known as *caseon* and *Siebold's milk albumin*, is an albuminous nutritive prepared from caseïn; a faintly yellow, odorless, slightly sweetish, granular powder, soluble in hot water. Dose, one or more teaspoonfuls with soup, etc., or as biscuits.—Mfrs.: Plasmomon Co., Neubrandenburg (Germany) and New York.

PLEISTOPON is pantopon without narcotine. This omission would not apparently materially change the nature of the preparation.

PLEJADIN is a substitute for migrainin, which is said to consist of "salts of antipyrin and of phenetidïn."—Mfr.: A. Voswinkel, Berlin W. Germany.

PLEJAPYRINE is a product resulting from the condensation of equal molecules of benzamide and phenyldimethylpyrazolone (antipyrine). It occurs as a white, odorless powder, of faintly bitter taste, and soluble in about 15 parts of water. Its melting-point is 75° C., and it is perfectly stable and nonhygroscopic. It is employed mainly as an analgesic in migraine. Dose, 10 to 20 grains.—Mfr.: A. Voswinkel, Berlin W, Germany.

PLESIOFORM is said to be an analogue of *thiol*.—Mfr.: A. Voswinkel, as above.

PLESIOL is one of the numerous organic sulphur compounds claimed to be the same as *ichthyol*.—Mfrs.: G. & R. Fritz, Vienna, Austria.

PLETHORAL is a preparation of *vaccinium myrtillus* recommended as a remedy in diabetes. It is described as a non-alcoholic, clear, reddish-yellow liquid, having an aromatic odor and a bitter taste.—Mfr.: Gustav Ludwig, Schöneberg-Berlin, Germany.

PNEUMIN is *methylene-creosote*, a yellowish, odorless, tasteless powder, used in tuberculous affections. Dose,

0.5 to 1 gram 4 to 8 times daily, as tablets (so marketed). See caution under *formaldehyde*.—Mfrs.: Speier & von Karger, Berlin N, Germany.

POLLANTIN is the name applied to Dunbar's hay fever serum, an antitoxin serum from horses treated with pollen toxin derived from ragweed. It is marketed in powder and liquid forms, and used for the relief of attacks of hay fever and rose cold and as a preventive. A spring and fall variety are furnished. The liquid is used mostly on the eye, the powder in the nose.—Mfrs.: Schimmel & Co., Miltitz, near Leipsic, Germany; agts.: Fritsche Bros., New York.

POLYCHLORAL is a compound of pyridine and chloral, slowly soluble in cold water, more rapidly in hot water or in alcohol, with the formation of chloral hydrate or alcoholate respectively. Alkalies decompose it into chloroform and formic acid. It possesses hypnotic and anesthetic properties. See caution under *formaldehyde*.

POLYFORMIN is obtained by dissolving resorcin in formaldehyde solution and adding an excess of ammonia without cooling. It forms an odorless, yellowish-brown amorphous body, insoluble in the usual solvents, and intended for use as a substitute for iodoform externally. *Polyformin soluble* is diresorcin-hexamethylenetetramine $[C_6H_4(OH)_2]_2(CH_2)_6H_4$, and results from combining 2 molecules of resorcin with 1 hexamethylenetetramine. It occurs as a white crystalline substance, soluble in water or alcohol and insoluble in ether or oils; hot water liberates formaldehyde and changes the drug to an insoluble product. It is used externally in skin diseases; internally as an antifermentative. See caution under *formaldehyde*.—Mfr.: Dr. G. F. Henning, Berlin SW, Germany.

POLYGONUM CUSPIDATUM. According to Goris and Crété, the bark of the rhizomes as well as the entire very young rootlets contain a large percentage of emodin. As much as 1.2 per cent. of the latter was found in the dried bark and 0.67 per cent. in the entire dried rhizome. It is consequently suggested for use as a laxative.

POLYGONUM DUMETORUM is a German weed growing on hedges, moist bushes, and fences. According to Tunmann, it is a serviceable laxative. The entire plant is used, generally in the form of a decoction of 10 grams in 200 grams of water. 100 parts of fresh leaves yield 19 parts of dried leaves and 100 parts of fresh herb yield 25 parts of dried herb. According to the examinations thus far made, the laxative action is due to the presence of tanno- and anthra-glucosides; free emodin does not exist in the plant.

POLYPHORINE is the name applied to sugar granules containing in each small teaspoonful 0.25 gram of the glycerophosphates of calcium, iron and magnesium.

POLYPIN is a snuff said to consist of powdered arnica, chamomile, roasted chestnuts, sweet marjoram and veratrum viride.—Mfr.: J. Rochhausen, Pauen, Germany.

POLYSAN is a nutrient containing lecithin.

POLYSOLVE (*solvine*) is *sodium sulphuricinolate* or a mixture of ammonium and sodium sulphuricinates. It is employed as an antiseptic and disinfectant, also as a solvent for water-insoluble medicaments for endermic application (naphthol, iodine, etc.).—Agts.: Lehn & Fink, New York.

PORCHERINE is a substitute for cane sugar—apparently a solution of saccharin in glycerin.

PORCIDIN is a new swine-plague vaccine prepared according to the method of Dr. Koerner.—Mfrs.: Bengen & Co., Hanover, Germany.

POSLAM is a gray ointment of the consistency of petrolatum and possessing a tarry odor. Qualitative examination in the laboratory of the American Medical Association demonstrated the presence of zinc oxide (12.01 per cent), sulphur (6.67 per cent.), corn starch (22 per cent.), tar oil (15.8 per cent.), menthol and salicylic acid (small quantities), and fatty base (probably petrolatum). The article is exploited as a remedy for eczema and other skin diseases.—Mfrs.: Emergency Laboratories, New York.

POTASSACOL is a trade name applied to *potassium guaiacol-sulphonate* (better known on this market as *thiocol*). It is one of the ingredients of triacol.—Mfrs.: Alpers Chem. Co., New York.

POTASSIUM COPAIVATE, $C_{20}H_{31}O_2K$, is a thick, reddish-brown, alkaline liquid, of acrid, peppery taste and copaiba odor; soluble in alcohol, ether or chloroform, decomposed slowly by water. Dr. L. Kolipinsky has recommended it in place of copaiba. Dose, 50 to 150 grains per day, in capsules.

POTASSIUM GLYCERINOPHOSPHATE, $C_2H_3O_2PO(OK)_2 + H_2O$, is marketed as 75 per cent. aqueous solution—a colorless to yellowish, viscid liquid, soluble in all proportions in water. It is used as a nerve tonic and reconstructive, chiefly subcutaneously. Dose, hypodermically, 3 or 4 grains once daily in sodium chloride solution; per os, 4 to 10 grains thrice daily as solution or syrup. Its liquid preparations are prone to spoil on keeping, hence are best prepared in small quantities at a time. A drop or two of chloroform to the fluid ounce renders them far more stable.

POTASSIUM OXYQUINOLINE-SULPHATE is better known as *chinosol*, which see.

POTOBONUM is a bean-husk tea used in gout, rheumatism and diabetes.—Mfr.: Paul Ernst, Rendsburg, Germany.

POTTASOCAINE is the name applied, according to Lührig, to a solution of cocaine in alcohol and ether. It is used as a local anesthetic and obtundent.

PRASOID.—See under "globularin."

PREVALIDIN is what W. Koch calls a readily absorbed camphor ointment intended to be used by inunction instead of hypodermic injections of camphor. It has been used in phthisis, emphysema, chronic bronchitis, etc. It consists of percutilan with 10 per cent. of camphor and a little balsam of peru, oil of eucalyptus and oil of rosemary.—Mfrs.: Wollwascherei und-Kämmerei, Döhren, Germany.

PRIMON is a *lecithin* obtained from vegetables.—Mfr.: E. Ziegler, Berlin, Germany.

PROBILIN PILLS are said to consist of salicylic acid $1\frac{1}{2}$ grains, acid sodium oleate $1\frac{1}{2}$ grains, phenolphthalein 1 grain and menthol $\frac{1}{4}$ grain. According to an analysis made by a chemist at the instigation of the American Medical Association, each pill contains approximately 0.008 gram of phenolphthalein, 0.01 gram of sodium salicylate, 0.1 gram of sodium oleate with free oleic acid, menthol 0.01 gram, moisture 0.006 gram and dusting-powder (lycopodium, licorice and charcoal) 0.065 gram. They act as a cholagogue, and are used in diseases of the biliary passages—particularly in gall-stone disease. Dose in the latter affection, 3 or 4 pills with about a pint of hot water before breakfast and at bedtime for twenty consecutive days, hot applications to the hepatic region being made at the same time in the beginning, then for twenty days more 3 or 4 pills are taken either morning or evening the same way as before.—Mfrs.: Goedicke & Co., Leipzig; agts.: Schering & Glatz, New York.

PROFERRIN is defined as an "iron nucleo-proteid, an organic compound of iron and phosphorus, containing 10 per cent. of organic iron and about $\frac{1}{2}$ per cent. of phosphorus." It occurs as a reddish-brown powder, insoluble in water and acid solutions, but soluble in alkali solutions with production of a yellowish-red solution. It is employed as a hematinic and nerve nutrient. Dose, 3 to 6 grains.—Mfr.: H. K. Mulford Co., Philadelphia, Pa.

PROFERRIN COMPOUND is said to consist of proferin 3 grains, strontium arsenite $\frac{1}{60}$ grain, strychnine phosphate $\frac{1}{100}$ grain, extract cascara $\frac{1}{4}$ grain and extract gentian $\frac{1}{4}$ grain per tablet.—Mfr.: H. K. Mulford Co., Philadelphia, Pa.

PROIODINE (*projodin*), originally named *lactoiiodine* ("lactoiod"), is an iodocasein containing about 8 per cent. of iodine and 86 per cent. of albumin. It occurs as a yellowish-white, odorless and almost tasteless powder; insoluble in water or acidulous liquids, soluble in solutions of the alkalis and of sodium and potassium phosphates. It is offered as a succedaneum for the alkali iodides inter-

nally. Dose, 30 to 120 grains several times daily, as 15-grain tablets (so marketed).—Mfrs.: Dr. A. Wölff, Bielefeld, Germany.

PROMPTIN is a snuff exploited as a remedy in throat, nasal and pharyngeal catarrhs. It is said to consist of a mixture of boric and tannic acids, milk sugar, orris root, starch, roasted coffee, menthol, cacao butter, thymol and oil of gaultheria.—Mfrs.: Garantol Co., Dresden, Germany.

PROPAL is a trade name for *dipropylbarbituric acid* (*proponal*).

PROPESIN is the trade name adopted for the *propyl ester of para-amidobenzoic acid*, a substance to which the chemical formula $C_6H_4.NH_2.COOC_2H_5$ has been assigned. The substance occurs as white crystals somewhat sensitive to light and of faintly alkaline reaction. It is sparingly soluble in water, but freely soluble in alcohol, and other organic solvents. Fatty oils, such as almond and olive oils, will dissolve about 7 per cent. of the chemical without the aid of heat. Propesin is claimed to be non-poisonous as well as non-irritating, and to be a good local anesthetic for all mucous surfaces.—Mfrs.: Franz Fritzsche & Co., Hamburg, Germany; agts.: Parmele Pharm. Co., New York.

PROPHYLACTOL is a 20 per cent. solution of protargol containing 0.05 per cent. of corrosive sublimate and intended for use with the aid of a special syringe as a urethral injection to prevent gonorrhea.—Mfr.: Victoria Apotheke, Berlin SW, Germany.

PROPIONE.—See *diethyl-ketone*.

PROPIONYL-PHENETIDIN is the chemical designation for the article marketed as *triphenin*, which see.

PROPIONYL-SALICYLIC ACID, $C_6H_4.CO_2H.CO_2O.CH_2-CH_3$, has been recommended as a remedy in gout and rheumatism. It occurs as white, shining leaflets that are sparingly soluble in water, more readily soluble in ether or chloroform, and are decomposed by alkalis. Dose, 10 to 20 grains.

PROPOL (*propolisin-vasogen*) is a mixture of propolisin and vasogen. It is intended to be used as a disinfectant of wounds as well as of surgical instruments.—Mfr.: Dr. Meyer, Bernstadt, Germany.

PROPOLISIN is a reddish-brown, oily liquid of characteristic but not unpleasant odor, reported to be essentially identical with crude oil of amber and to be employed as an antiseptic, especially in tuberculous wounds.—Mfr.: R. Spiegler, Gr. Hemersdorf, Germany.

PROPONAL (*dipropylmalonylurea* or *dipropylbarbituric acid*) is allied chemically to veronal (*diethylmalonylurea*) and is the discovery of the same investigators, Profs. Fischer and Von Mering. It occurs as a colorless crystalline substance, soluble in 1640 parts of water, freely

soluble in alkaline liquids and in alcohol. It is a hypnotic, stated to be twice as powerful as veronal and quicker in action, and to be serviceable also in insomnia caused by pain. Dose, 3 to 8 grains, best taken as a powder with hot tea or some alcoholic beverage.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

PROPYLAMINE. See *trimethylamine solution*.

PROPYL ESTER OF PARA-AMIDO-BENZOIC ACID. See *propesin*.

PROPYRINE is a trade name for *sodium thymobenzoate* (thymol oxybenzoate).

PROSTADEN is a saccharated dried extract of prostate gland, 1 part of which represents 2 of the fresh gland. It is employed in prostatic hypertrophy. Dose, 10 to 40 grains per day, as tablets usually.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

PROTALFERRIN is defined as "an organic combination of iron, protein, albumin and a small percentage of sodium chloride," and is extolled as a readily assimilated form of iron. It is marketed as capsules, each containing 5 grains of protalferrin and 1/12 grain of extract of *nux vomica*. Dose, 2 capsules three times a day.—Mfrs.: Protalferrin Chem. Co., New York.

PROTAN is defined as "*tannin nucleo-proteid*, containing about 50 per cent. of tannin combined with casein." It is a light-brown powder, tasteless, odorless and free from astringent action upon the mouth and stomach. It is insoluble in water or dilute acid solutions. It is employed as an intestinal astringent. Dose, 20 to 30 grains every hour or two if necessary.—Mfr.: H. K. Mulford Co., Philadelphia, Pa.

PROTAN COMPOUND is described as containing in each tablet protan 2 grains, bismuth subnitrate ¼ grain, zinc sulphocarbolate ⅛ grain, pancreatin ⅙ grain, powdered ginger 1/16 grain, guaiacol 1/20 grain, and oil of anise q. s. It is employed as an intestinal antiseptic and astringent.—Mfr.: H. K. Mulford Co., Philadelphia, Pa.

PROTARGOL (*silver-proteid*) is a compound of albumin and silver. It occurs as a light-brown, bulky powder containing 8 per cent. of metallic silver, readily soluble in water or glycerin, and not precipitated by alkalis, alkali sulphides, albumin or sodium chloride. It is used externally as an astringent bactericide—chiefly in gonorrhea and purulent eye diseases, but also in nose and throat troubles, ulcers, etc. In gonorrhea ¼ to 2 per cent. solutions are employed; in eye diseases ½ to 5 per cent. solutions; in ear, nose and throat troubles 2 to 10 per cent. solutions; and on ulcers, etc., 5 per cent. ointments or dusting powders. There would probably be the same risk of permanent discoloration of the skin from any internal

use of this preparation as from silver nitrate. Its solutions must be made with *cold* water, and kept in dark bottles; and contact with metallic objects must be avoided. To prepare solutions, place the drug in a glass or porcelain mortar containing a little cold water; stir into a thick paste, and gradually add more water, according to the strength desired. Or sprinkle the powder gently upon the surface of the required quantity of cold water, and then cover the vessel and set aside until solution has been effected. If it be desired to rub down protargol in a mortar, the latter as well as the pestle should be moistened with a drop of glycerin. Bougies and suppositories of the remedy are made by various firms. Keep the bottle in a dry, cool place, and protected against light. Protargol stains on the linen when fresh readily disappear on washing with soap and water. Old stains should be treated with solution of potassium iodide, sodium hyposulphite, etc.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

PROTEINUM PYOCYANEUM HONL is an extract of cultures of the bacillus pyocyaneus; a greenish-yellow, faintly alkaline liquid of an odor reminding of tilia flowers, that retains its efficacy for a long time if kept in a cool, dry, and dark place. It has been used by Dr. Janowsky in ulcers of the leg, pure on gauze tufts.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

PROTEOL (Doyen) is defined by the manufacturers as a compound of formaldehyde and albumin, and is offered as a surgical antiseptic.—Mfr.: P. Lebeaut, Paris, France.

PROTIODE is described by Crinon as *iodo-ethyl-glycin*, a crystalline, colorless and odorless substance which is readily soluble in water, non-toxic and not causing iodism. It is intended as a succedaneum for the alkali iodides.

PROTOFERRIN is a brand of iron paranucleinate marketed in powder form and as tablets.—Mfr.: Phil. Röder, Berlin, Germany.

PROTOGEN (*ovo-protogen; methylene-albumin*) is obtained by heating egg albumin with formaldehyde, and occurs as yellow powder. This is put forward as a nutrient notwithstanding the fact that formaldehyde is a poison and that there is risk from any of its compounds. There is a risk also of blindness from it. See further under *formaldehyde*.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

PROTON (not protan) is a nutritive prepared by Jost from milk; a white powder containing 90 per cent. of albumin and soluble in water, and hence closely similar to plasmon.—Mfrs.: Akt-Ges. "Separator," Stockholm, Sweden.

PROTONUCLEIN is "a combination of all the nucleins in the body, separated in unchanged form from the lymph-

old structures of healthy animals without the use of chemicals." It is used internally or hypodermically as a tissue-builder and as an antitoxin in infectious diseases, and topically on surgical lesions. Dose, 3 to 10 grains three or four times daily, before meals. Marketed also as 3-grain tablets, 2-grain special tablets, and special powder.—Mfrs.: Reed & Carnrick, Jersey City, N. J.

PROTOSAL is the trade name applied to *salicyl-acid-glycerin-formaldehyde ester*, an oily, colorless liquid of the specific gravity 1.344 at 15° C., readily soluble in alcohol, and some oils; insoluble in water, or glycerin. Diluted acids or alkalis decompose the substance into salicylic acid, glycerin and formaldehyde. Protosal is intended for local use as an antirheumatic, analogously to mesotan. See caution under formaldehyde.—Mfr. E. Schering, Berlin; agts.: Schering & Glatz, New York.

PROTOZONE is a lotion for eczema and other skin affections, the composition of which is given as "thymol-sodium benzoate, sodium salicylate, citronol (?), glycerin, and alcohol." It is applied pure as a rule.—Mfrs.: Physicians' Med. Supply Co., Chicago, Ill.

PROTYLIN (*phosphorus-albumin*) is a synthetic proteid, an organic compound of phosphorus and albumin, containing 2.7 per cent. of the former element (=6 per cent. P_2O_5). It occurs as a white, odorless, tasteless powder, insoluble in water but soluble in alkaline liquids. It is offered as an assimilable, nontoxic form of phosphorus, in place of lecithin and the glycerinophosphates in cases of neurasthenia, rickets, scrofula, etc. Dose, 10 to 20 grains three times daily, in soup, broth, etc.; children, 4 to 15 grains. It must not be boiled with the food. *Brom-protylin* (bromated phosphorus-albumin) contains 2.7 per cent. of phosphorus and 4 per cent. of bromine organically combined with albumin, and is employed as a nerve-nutrient and sedative in hysteria, epilepsy and other neuroses. It is a faintly yellowish powder, of slight bromine taste and odor, not perceptible when mixed with food. Dose, 10 to 20 grains three or four times a day. *Iron-protylin* (ferrated phosphorus-albumin) is protylin with 2.3 per cent. of iron. It forms a white, odorless and tasteless powder, soluble in alkaline fluids and prescribed as a constructive and hematonic in doses of 10 to 20 grains thrice daily, in soup, broth, etc. Protylin and its combinations are marketed also as 0.25 gram tablets.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle (Switzerland) and New York.

PRUNITURA is a plum extract syrup used abroad as a purgative.—Mfrs.: Kaiser Wilhelm Apotheke, Berlin NO, Germany.

PRUNOIDS are laxative tablets containing as their chief active ingredient $1\frac{1}{2}$ grains of phenolphthalein, together with cascara sagrada, de-emetized ipecac and

prunes. Dose, 1 to 3 tablets at bedtime.—Mfrs.: Sultan Drug Co., St. Louis, Mo.

PSEUDO-HYOSCYAMINE is an alkaloid existing beside hyoscyamine, in *duboisia*. It is used as a sedative chiefly in the insane. Dose, 1/120 to 1/60 grain; in the insane, 1/30 to 1/10 grain subcutaneously.—Mfr.: E. Merck, Darmstadt, Germany; agts.: E. Merck & Co., New York.

PSORIALAN is an unguentous substance obtained by Torriani by heating margaric acid with mercury oxide for several hours at 180° C. It occurs as a reddish, unctuous mass which is used byunction in syphilis and certain cutaneous affections.

PTYOPHAGON is described by Thoms as "a preparation of cresol, to which sodium hydroxide solution has been added." It is intended as a means of radically destroying tubercle bacilli in sputum—the caustic soda constituent converting the albuminoids and mucin of the sputum into soluble albuminates and saponifying the fat, while the cresol destroys the thus deterged bacilli.

PULMACOL is, according to Dr. Zernik, a syrup of potassium guaiacolsulphonate combined with extract of thyme. It is exploited as a remedy for affections of the respiratory apparatus.

PULMOFORM is a trade name for *methylene-diguaiacol*, which see.—Mfrs.: Dr. Speier & von Karger, Berlin N, Germany.

PULMONIN (*pulmogen*) is an extract of fresh calves' lung, heralded as a remedy in various pulmonary affections. It is marketed as 0.25 gram tablets, 5 to 10 of which constitute the daily dose.—Mfr.: Laboratoire Sauter, Geneva, Switzerland.

PULMONIN-PSEPHOFER is a name latterly applied to a compound syrup of thyme, employed in pertussis and other chronic coughs. It should not be confounded with the pulmonin prepared from calves' lungs.

PULVERETTE is the name for pills of English origin which are covered with a thin hard coating, but can easily be crushed to a powder.

PULVIS CUTICOLOR UNNA consists of zinc oxide 2 parts, magnesium carbonate 3, white bole 3, red bole 2, and rice starch 10. It is used in certain skin diseases.

PULVIS DUODENALIS is what P. H. Marsden, of Liverpool, calls a pulverulent preparation of the duodenum, the production of which was suggested by the beneficial results reported from the use of secretin (see this) in diabetes. The article has an odor recalling that of pepsin. It is prepared by cleansing the upper portion of the fresh duodenum of the pig, scraping the mucous membrane from it and drying at a temperature of 70° to 80° C. in a water oven upon glass plates. Three parts of this dried substance are mixed with one of calcium phosphate

and the powder passed through a No. 60 sieve. The powder should be kept in well-corked bottles, and will then retain its properties for some time. This preparation is used on the assumption that there is in the stomach of the patient sufficient hydrochloric acid to convert the duodenal pre-enzyme into the enzyme.

PUNICINE is a synonym of the well-known *pelletierine*.

PURAL is a disinfectant consisting, according to Rosenthal, of powdered charcoal impregnated with carbolic acid, menthol and benzoic acid, and marketed compressed into cylinders which are ignited and placed on saucers, thus giving off the disinfectant vapors.

PURGAMENTA (*liqueur purgative*) is a purgative consisting, according to Dr. Aufrecht, of a mixture of alcoholic solution of phenolphthalein and honey of fennel.—Mfr.: Alex. Kalmar, Budapest, Hungary.

PURGATIN (*purgatol; purgyl*) is a trade name applied to *anthrapurpurin diacetate* or *anthrapurpurin diacetyl ester*, a yellow, tasteless powder insoluble in water and diluted acids but dissolving with a dark-red color in alkali solutions. It is used as a mild purgative in habitual constipation. Dose, 10 to 30 grains at bed-time. Marketed also as chocolate tablets containing 0.3 gram of the drug. It imparts a blood-red color to the urine.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

PURGELLA is a palatable, effervescent laxative consisting of phenolphthalein, rochelle salt, sodium bicarbonate, fruit oil-sugar, and tartaric acid.—Mfrs.: Hesse & Goldstaub, Hamburg, Germany.

PURGEN (*purgo*) is a tablet consisting essentially of *phenolphthalein*. Purgen for adults contains in each tablet 0.1 gram, *baby purgen* 0.05 gram, and *strong purgen* 0.5 gram, of phenolphthalein.—Mfr.: H. Goetz, Frankfort-on-M.; agts.: Lehn & Fink, New York.

PURGETTAE are silver-coated tablets containing Kreuznacher salt and 50 per cent. of phenolphthalein.—Mfr.: Dr. Karl Aschoff, Bad Kreuznach, Germany.

PURGLETS is another trade name for 0.1 gram tablets of phenolphthalein, exploited as a laxative.—Mfrs.: "Sico," Berlin W, Germany.

PURGOLADE is the name given to laxative tablets each containing 1 grain of phenolphthalein.—Mfr.: C. Auerbach, Berlin C, Germany.

PURGYL. See *purgatin*.

PURJODAL is said to be a syrup of sarsaparilla with sodium iodide.—Mfr.: Apotheke Herabny, Berlin, Germany.

PURO is a clear, dark-red, semi-solid mass prepared under pressure from fat-free meat. It is employed as a *dietetic*. Dose, 3 or 4 tablespoonfuls daily, in milk, bouillon, etc.—Mfr.: Dr. H. Scholl, Thalkirchen, Germany.

PUROFORM is a disinfectant solution said to consist of zinc chloride, formaldehyde, thymol, menthol and eucalyptol. See caution under *formaldehyde*.—Mfr.: Kronen-Apotheke, Berlin, Germany.

PURONAL is said to be a mixture of acetanilid (97.6) and bismuth oxyiodide (2.4), employed as a wound antiseptic. Other formulas have also been published.

PYOCYANASE is described as a preparation of the bacteriolytic enzyme contained in cultures of the bacillus pyocyaneus. It is used mainly as a local application in diphtheria, 3 to 4 c.c. being sprayed into the throat several times daily, and as a prophylactic of influenza and cerebrospinal meningitis by instillation into the nose. More recently it has also been tried in gonorrheal eye-disease, purulent ear inflammation, cancer, etc.—Mfrs.: Sächsisches Serumwerk, Dresden, Germany.

PYOKTANIN is the name given by Prof. Stilling, of Strassburg, to pure *methyl violet*, which is a natural mixture of penta- and hexa-methyl-para-rosanilin hydrochloride; a violet powder, soluble in 75 parts of water, 12 of alcohol, and 50 of glycerin, but insoluble in ether. It is occasionally prescribed as a surgical antiseptic and discutient, chiefly in veterinary practice; its disagreeable staining properties have caused it to be abandoned largely in human medicine. It has also been given internally in gastric and other visceral cancer. Used pure or in tituration with boric acid, or as ointment, or as a "pencil," or in 1:1000 to 1:100 solutions. It is incompatible with corrosive sublimate. Its stains may be removed by rubbing well with soap and washing with alcohol.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

PYOKTANIN-MERCURY (*pyoktanin with mercuric chloride*) is a violet powder difficultly soluble in water or alcohol, containing 16 per cent. of mercury, and used in gonorrhea (1:2000 solution), burns (with equal part of starch), favus, etc.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

PYOKTANIN, YELLOW.—See *auramine*.

PYOLUENE (*oxy-methyl-allyl-sulphocarbimide*) is described as a bactericide equal to corrosive sublimate yet non-toxic, and soluble in water, alcohol, glycerin or ether.

PYONIN OINTMENT is said to contain sulphur made water-soluble by a special process (!)

PYRACETOSALYL is a proposed substitute for *mi-grainin*.—Mfrs.: Gehe & Co., Dresden N. Germany.

PYRALOXIN is the name given by Dr. P. G. Unna to *oxidized pyrogallol*, and recommended by him as a substitute for pyrogallic acid in skin diseases. It occurs as a black, insoluble powder and is said to be non-irritating.—

Mfr.: H. Mielck, Hamburg, Germany; agts.: Lehn & Fink, New York.

PYRAMIDON (*dimethylaminoantipyrin*; *phenyldimethyl-dimethylaminopyrazolon*), $C_{12}H_{17}N_3O$, is a derivative of antipyrin in which an H atom is replaced by a dimethylamino group; a yellowish-white, almost tasteless, crystalline powder, soluble in 11 parts of water, and readily soluble in alcohol or ether. It is an antipyretic and analgesic, largely used in the fever of consumptives. Dose, 4 to 10 grains, as powders or in solution. Incompatible with ferric chloride spirit of nitrous ether, and other substances incompatible with antipyrine; also oxidizing agents and acacia. *Pyramidon camphorate, neutral*, consists of 69 per cent. of pyramidon and 31 per cent. of camphoric acid, and has some antihidrotic action, though the antipyretic action predominates; dose, 5 to 12 grains. *Pyramidon camphorate, acid*, is a compound of 47 parts of pyramidon and 32 of camphoric acid, which occurs as a white crystalline powder, soluble in 20 parts of water and 4 parts of alcohol, and which has still greater sweat-arresting power than the neutral camphorate, and used in phthisical fever. Dose 10 to 15 grains. *Pyramidon salicylate* is a white, crystalline powder soluble in 16 parts of water or 6 parts of alcohol. It is specially intended for use in rheumatism and neuralgias. Dose, 8 to 15 grains.—Mfrs.: Meister, Lucius & Brüning, Hoechst-on-M., Germany; agts.: V. Koechl & Co., New York.

PYRAN.—See *pyrenol*.

PYRANTIN (*phenosuccin*; *para-ethoxy-phenyl-succinimide*) is obtained by melting the hydrochloride of paramido-phenetol or phenacetin with succinic acid, and forms colorless needles soluble in about 1300 parts of water, insoluble in ether. *Soluble pyrantin* is the sodium salt of pyrantin. Both preparations are antipyretics. Dose, 5 to 15 grains.—Mfrs.: Meister, Lucius & Brüning, Hoechst-on-M., Germany; agts.: V. Koechl & Co., New York.

PYRANUM.—See *pyrenol*.

PYRAZOLONUM PHENYLDIMETHYLICUM is the German Pharmacopœia name for *antipyrin*.

PYRAZOLONUM PHENYLDIMETHYLICUM SALICYLICUM is the designation of the German Pharmacopœia for *salipyrin*, which see.

PYRENOL (originally called *pyran*) is defined as "benzoyl-thymol-sodium benzoyl-oxybenzoate; a compound of benzoic acid, salicylic acid and thymol in the form of a water-soluble sodium salt." According to reports by Zernik, Thoms and others, it is essentially a mixture of equal parts of sodium salicylate and sodium benzoate admixed with a fused mixture of 1 per cent. of benzoic acid and 0.2 to 0.3 per cent. of thymol. It occurs as a white, slightly hygroscopic powder of aromatic odor, and soluble in 5 parts of water and in 10 of alcohol. It is prescribed

as an antipyretic and anodyne in pulmonary affections, rheumatism, etc. Dose, 8 to 30 grains, with cold water; hot solvents should be avoided. Marketed also as 0.5 gram tablets.—Dr. Arthur Horowitz, Berlin N, Germany; agts.: Schering & Glatz, New York.

PYRENOL, NEW, is said to "contain the empyreumatic substances of benzoic acid and thymol in *completely* water-soluble form." It is identical therapeutically with the older pyrenol.—Mfrs.: Goedecke & Co., Leipsic and Berlin; agts.: Schering & Glatz, New York.

PYRETIN is said to be a mixture of acetanilid, caffeine, calcium carbonate, sodium bicarbonate, and potassium bromide; other reports make no mention of potassium bromide as an ingredient. It is used as an antipyretic and anodyne. Dose, 5 to 15 grains.

PYRICIT is a new disinfectant occurring as a grayish-white powder readily and completely soluble in water. It is said to consist of a mixture of borofluorides and sodium bisulphite.

PYRIDINE TANNATE is intended for a uric acid solvent; also an intestinal astringent and wound antiseptic. It is a powder, sensitive to light.

PYRILIN (not pyraline) is a preparation of pyridine ethylphosphinate, placed upon the market by an English firm in the form of an elixir. It is put forward as a remedy for disorders of the respiratory organs.—Mfrs.: Lorimer & Co., London N, Eng.

PYROCATECHIN METHYL-BENZYL ETHER.—See *brenzcain*.

PYROCTIN is another of the numerous composite antipyretics and anodynes, the base of which is acetanilid. Dose, 5 to 15 grains. Marketed also as 5-grain tablets, plain and in combinations.—Mfrs.: Pyroctin Co., Columbia, S. C.

PYRODIN.—See *acetyl-phenyl-hydrazin*.

PYROFORM (*bismuth oxyiodo-dipyrogallate*) is obtained by treating bismuth oxyiodide with oxidized pyrogallol (pyraloxin), and has been introduced as a relatively non-toxic substitute for pyrogallic acid in dermatology. It occurs as a gray, insoluble powder.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle (Switzerland) and New York.

PYROGALLOL-BISMUTH is described under *bismuth pyrogallate*.

PYROGALLOL DIACETATE.—See *saligallol*.

PYROGALLOL MONO-ACETATE.—See *eugallol*.

PYROGALLOL, OXIDIZED.—See *pyraloxin*.

PYROGALLOL TRIACETATE.—See *lenigallol*.

PYROGLYCERIN is a synonym of *nitroglycerin*.

PYROIODON (*Piroiodone de Sanctis*) is an Italian succedaneum for the alkali iodides subcutaneously. It is

marketed in ampuls as a yellowish, odorless liquid of faintly acidulous taste. According to Dr. Cousin, 100 c.c. of this solution contain 24.3 grams of pyramidon hydroiodide and 7.4 grams of uncombined pyramidon. The iodine content of the dry substance is 27 per cent.

PYROLEOL is described as a vegetable oil washed with alcohol, and containing extracts of meliolotus, hypericum and eucalyptus, and sterilized by heat. It is put forward as an application to burns, etc.—Mfr.: "Edel," Alençon, France.

PYROLIGNEINE is naively described as "a combination of certain pyroligneous acids with cresols, methyls and other things, the resultant being a dark-red fluid free from disagreeable odor." It is advertised as an antiseptic, antipytic and antiphlogistic.—Mfrs.: Pyroligneine Co., Winchester, Tenn.

PYROLIN is defined as a basic magnesium salt obtained by adding magnesia to pyroligneous acid and is offered as a general disinfectant.

PYROSAL is the trade name for *acid antipyrin acetylsalicylate*, an antineuralgic occurring as a white powder, of bitter-acidulous taste, sparingly soluble in water, and split up into its components in the intestines. Dose, 8 to 15 grains two to six times daily, in powders or as tablets (also so marketed).—Mfrs.: Dr. Hofmann Nachf., Meerane, Saxony; agts.: Lehn & Fink, New York.

PYROZONE is a trade name for 3 per cent. solution of hydrogen peroxide in ether. *Pyrozone, caustic*, is a 25 per cent. solution of hydrogen peroxide, used as a freckle remedy.—Mfrs.: McKesson & Robbins, New York.

Q

QUARTONOL Tablets consist of the four "tonols" (glycerinophosphates) of calcium ($2\frac{1}{4}$ grains), sodium ($2\frac{1}{4}$ grains), quinine ($\frac{1}{2}$ grain), and strychnine (1/200 grain). They are prescribed as nerve and tissue nutrients.—Marketed by Schering & Glatz, New York.

QUASSONE is a liquid nerve-sedative stated to be non-alcoholic, the composition of which is unknown.—Mfrs.: Central Pharm. Co., New York.

QUICKINE is a solution of 1 part of corrosive sublimate and 50 parts of carbolic acid in 5,000 parts of diluted alcohol. It is employed as an antiseptic and disinfectant.

QUIETOL is the trade name applied to the hydrobromide of valeryl dimethyl aminooxyisobutyrate of propyl or what is tersely known as *valeryl oxybutyrene*. The article occurs as needles that are freely soluble in water and in alcohol and have a feeble but disagreeable taste.—

Mfrs.: Poulenc Frères, Paris, France; agts.: Parmele Pharm. Co., New York.

QUINACETINE is a base of the formula $C_{27}H_{41}NO_2$. Its *sulphate*, the only salt marketed, occurs as white, lustrous needles adhering in tufts, of a slightly astringent and bitter taste, and readily reduced to powder. It forms freely soluble acid salts, incompatible with metallic hydrates and with carbonates. Its action and uses are the same as those of quinine sulphate. Dose, 5 to 15 grains.—Marketed by Theo. Metcalf Co., Boston, Mass.

QUINALGEN (also known as *analgen*, *benzanalgen*, and *labordine*) is chemically ortho-ethoxy-ana-monobenzoylamido-quinoline, $C_6H_4N(OC_2H_5)NH.CO.C_6H_5$, and forms a white tasteless powder soluble in hot alcohol and in slightly acidulated water, but insoluble in pure water. It is prescribed as an analgesic and antipyretic, in neuralgia, rheumatism, febrile affections, etc. Dose, 5 to 15 grains two or three times a day; maximum daily dose, 45 grains. Marketed by G. F. Harvey Co., Saratoga Springs, N. Y.

QUINAPHTOL (*chinaphtol*) is the name given to *quinine beta-naphtol-monosulphonate*, $C_{20}H_{19}N_2O_2.(C_{10}H_7OH.SO_3H)_2$. The drug occurs as a yellow powder slightly soluble in hot water or alcohol, and containing 42 per cent. of quinine. It is employed as an intestinal antiseptic and as an antipyretic. Dose, 8 to 15 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

QUINARSIN is an antiperiodic, each fluidounce of which contains quinine 4 grains, cinchonine 8 grains, sodium arsenate 1/16 grain, tincture nux vomica 1 minim and potassium iodide 5 grains.—Mfr.: Sharpe & Dohme, Baltimore, Md.

QUINASEPTOL.—See *diaphtol*.

QUINETUM is the total alkaloid of red cinchona. It occurs as an amorphous, gray powder, readily soluble in dilute acids. It is used as an antiperiodic. Dose, 3 to 10 grains.

QUINETUM CARBOXY-ETHYL ESTER is described under *euchinal*.

QUININE ACETYLSALICYLATE (*quinine-aspirin*) occurs as a white, bitter powder that is readily soluble in alcohol and sparingly soluble in water. It is used as an antipyretic and analgesic in peritonitis, pleurisy, etc. Dose, 5 to 15 grains.—Mfrs.: Zimmer & Co., Frankfort-on-M., Germany; agts.: C. Bischoff & Co., New York.

QUININE ACID DIBROMOSALICYLATE is known in the trade as *bromochinal*, which see.

QUININE ÆSCULINATE.—See *escoquinine*.

QUININE-ANTIPYRIN.—See *chinopyrine*.

QUININE ARRHENALATE.—See *quinine metharsenate*.

QUININE-ASPIRIN.—See *quinine acetylsalicylate*.

QUININE-ATOXYL capsules are said to contain atoxyl, quinine hydrochloride, strychnine nitrate and Blaud's mass.—Mfrs.: Kaiser Friedrich-Apotheke, Berlin NW, Germany.

QUININE BETA-NAPHTOL-MONOSULPHONATE is referred to under its trade name, *quinaphтол*.

QUININE-BISMUTH SULPHOCYANATE is described under its trade name, *crurin*.

QUININE BLUTAN. See *chinablutan*.

QUININE CAMPHORATE, $(C_{20}H_{24}N_2O_2)_2 \cdot C_{10}H_{16}O_4 + H_2O$, is used as an antipyretic and antihydrotic. Dose, 5 to 15 grains.—Mfrs.: Lorimer & Co., Islington, Middlesex, Eng.

QUININE CARBONIC ESTER.—See *equinine*.

QUININE CARBONIC ESTER, NEUTRAL, is better known as *aristochin*; see this title.

QUININE DIBROMOGUAIACOLATE is described under *guaiaquinol*.

QUININE DIBROMOSALICYLATE, ACID, is *bromo-chinal*

QUININE EOSOLATE, $C_9H_7S_3O_{12} \cdot (C_{20}H_{24}N_2O_2)_3$, is one of the series of sulpho acid salts of the aliphatic creosote esters introduced by Dr. G. Wendt. It combines the antipyretic properties of quinine with the disinfectant and alterative action of creosote, and is hence used chiefly in tuberculosis with fever. Dose, 5 to 15 grains.—Marketed by Fischer Chem. Importing Co., New York.

QUININE ESCULINATE.—See *escoquinine*.

QUININE FORMATE, $C_{20}H_{24}N_2O_2 \cdot HCOOH$, occurs as white, bitter crystals, soluble in water, alcohol or chloroform. It has been recommended by Catillon and Lacroix as a substitute for quinine, by hypodermic injection. Dose: 3 to 10 grains.

QUININE GLYCERINOPHOSPHATE, $C_2H_5O_4PO_4(C_{20}H_{24}N_2O_2)_3$, occurs as a white powder, sparingly soluble in water, more freely soluble in alcohol and containing 68 per cent. of quinine. It is used chiefly in malaria associated with nervous disturbances. Dose, 3 to 10 grains, usually in pills, three times a day. Liquid preparations of it do not keep well, but may be rendered more stable by the addition of a drop of chloroform per fluid ounce. It should not be prescribed with carbonates, phosphates or lead salts, lest decomposition ensue; and hot solvents should be avoided.—(Nonproprietary.)

QUININE GLYCYRRHIZINATE is a brown powder containing 25 per cent. of quinine, and only slightly bitter in taste. It is intended especially for children's use. Dose, about double that of quinine sulphate.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

QUININE GUAIACOL-BISULPHONATE.—See *guaiquin*.

QUININE LYGOSINATE, $C_{57}H_{90}N_4O_6$, is a fine, yellow powder, with a bitter taste and hardly perceptible aromatic odor; sparingly soluble in water, readily soluble in alcohol or chloroform; quinine content 70.8 per cent. It is used as an antiseptic and styptic on wounds, as a dusting-powder, gauze, court plaster, etc. It is no longer on the American market.

QUININE METHYLARSENATE or "ARRHENALATE," $(C_{20}H_{24}N_2O_2)_2 \cdot AsO_3 \cdot (OH)_2 \cdot CH_3$, occurs as colorless, bitter crystals, sparingly soluble in water. It is said to be well borne in daily quantities of 9 to 12 grains. Its action is that of an antiperiodic and it is recommended in cases where the usual quinine salts are without effect.

QUININE NUCLEINATE occurs as a white powder of bitter taste and very sparingly soluble in water. It contains 60 per cent. of quinine. It has been used simultaneously with quinine hydrochloride in the treatment of syphilis (!). Suspended in olive oil, it is injected intramuscularly every second day alternately with quinine hydrochloride injected intravenously.

QUININE PHYTIN (*chininphytin*) is defined as the quinine salt of anhydro-oxymethylene-diphosphoric acid. It occurs as a yellowish powder readily soluble in water and containing 57 per cent. of alkaloidal quinine. One gram of it corresponds in quinine content to 0.75 gram of quinine hydrochloride and to 0.70 gram of quinine sulphate. It combines the therapeutic action of quinine and phosphorus, and is recommended particularly in malarial cachexia and neuralgia. Dose, 15 to 30 grains per day.—Mfrs.: Basle Chem. Works, Basle, Switzerland; agts.: A. Klipstein & Co., New York.

QUININE SALICYLIC ESTER.—See *saloquinine*.

QUININE SULPHOGUAIACOLATE is *sulphoguaiacin*.

QUININE TANNATE, BASIC, has the formula, $C_{20}H_{24}N_2 \cdot O_2 \cdot 3C_6H_4O_6 + 10H_2O$, and occurs as a yellowish-white powder almost insoluble in water. It contains from 40 to 50 per cent. of quinine alkaloid.

QUININE AND UREA HYDROCHLORIDE (*carbami-dated quinine dihydrochloride*), $C_{20}H_{24}N_4O_2 \cdot HCl + CO(NH_2)_2 \cdot HCl + 5H_2O$, occurs as white, odorless, bitter crystals or white powder, soluble in about one part of water and freely soluble also in alcohol. It contains 70 per cent. of quinine alkaloid. It has been used in severe cases of malaria hypodermically, 5 to 15 grains at a dose; and it has latterly come to the fore as a local anesthetic used in $\frac{1}{2}$ to 2 per cent. solutions by injection and in 10 to 20 per cent. solutions as an application to mucous membranes.—(Nonproprietary.)

QUININE-URETHANE is a soluble compound of quinine obtained by heating together 2 parts of quinine hydro-

chloride, 1 of urethane and 2 of water. It is intended especially for subcutaneous or intravenous injection.

QUININOSOL is a trade name applied to *quinine-vasogen*, containing 5 per cent. of the alkaloid. It is intended for use as a topic antiperiodic, analogously to quinine oleate.

QUINOCHLORAL.—See *chinoral*.

QUINOLEINE is a French name for *quinoline* (choline).

QUINOLIV is "a palatable powder of pure sulphate of quinine with olive oil as a disguisant," used just like ordinary quinine sulphate.

QUINOPYRIN.—See *chinopyrine*.

QUINOSOL.—See *chinosol*.

R

RACHITOL TABLETS (Dr. Stöltzner) each contain 1/12 grain of dried suprarenal gland and are prescribed in rickets (rachitis), 1 to 3, according to the weight of the child, per day. Maximum dose, 6 or 7 tablets.—Mfr.: E. Merck, Darmstadt.

RADAL is the fanciful name applied to a 20 per cent. solution of protargol.

RADIANT, a remedy for all kinds of diseases, is said to contain capsicum, "free acid," ethereal oils, and water.

RADININ is a local anesthetic said to consist of cocaine, and containing no adrenalin.—Mfr.: C. P. Schultz, Munich, Germany.

RADIOCARBENZYL is carbenzyme containing some radium and barium carbonate. It is intended for carrying out the radioferment therapy which consists of the combined action of enzymatic and radioactive substances.

RADIOGEN MUD is said to possess high radioactivity and is used, like fango and peat baths, in rheumatism, gout and the like, as a local application.—Mfrs.: Radiogen Co., Charlottenburg I., Germany.

RADIOGENOL is "an emulsion of insoluble radioactive minerals," marketed in ampuls and intended for use by injection into tumors, etc.—Mfrs.: Radium-Gesellschaft, Charlottenburg, Germany.

RADIOGUR CYLINDERS are tubes filled with a radioactive mass. They are employed for making radio-active baths by simple immersion in the water used for the baths.—Mfrs.: Radiogen Co., Charlottenburg I, Germany.

RADIOL is described as a water-soluble product, prepared from the radio-active mud of the springs at Kreuznach. It is used for making a number of preparations. *Radiol dauer compressen* (bandages) are recommended in

the treatment of swollen glands, tumors and inflammation of the joints. *Radiol gelatin bandage* is a bandage coated with a 10 per cent. suspension of radiol in gelatin. *Radiol suppositories* consist of cacao butter with 10 per cent. of radiol. *Radiol ointment* contains 10 to 20 per cent. of radiol. *Radiol soap* is a soap containing 3 per cent. of radiol.—Mfr.: E. de Haën, List, Germany.

RADIOPHOR is what Dr. Axmann has named a relatively cheap radio-active mass that is said to maintain its radio-activity in sufficient strength indefinitely. The mass is directly applied to the skin, to tumors or in cavities; it is also used on sounds, catheters, etc. For cutaneous lesions an area of a square centimeter is treated with radiophor, ready spread, and this is kept in place by a bandage or rubber.—Mfrs.: P. Beiersdorf & Co., Hamburg, Germany; agts.: Lehn & Fink, New York.

RADIOSAL is the original name applied to the radio-active bath salt now known as emanosal.—Mfrs.: Meister, Lucius & Brünig, Hoechst, Germany; agts.: V. Koechl & Co., New York.

RADIOVIS is a collective trade name for several preparations said to be "radioactivated."—Mfr.: O. Braemer.

RAMIN is a liniment containing in 1 liter 10 grams of sodium chloride, 10 c.c. of brandy, 30 grams of spirit ammonia and 0.25 gram of camphor. It is used in rheumatism, gout, etc.—Mfrs.: Hesse & Goldstaub, Hamburg, Germany.

RAMKULIN is a collective name for three "blood-purifying" preparations, the chief constituent of which is described by the manufacturer as "ramkulin extract, an organo-vegetable extract prepared from large, round-leaved spinach and carrots." There are marketed ramkulin pills, ramkulin liquid and ramkulin cascarrinated.—Mfr.: Pharm.-Chem. Institute, Gernrode, Germany.

RAMOGEN (Biedert) is a nutritive said to contain 1 part of albumin, 2 of fat, 4 of sugar, and 1/5 of salts. It is not the same as Biedert's cream mixture.—Marketed by L. Hoos, Chicago, Ill.

RATIN II, which is said to represent cultures of bacilli, has been found to be bread saturated with an aqueous extract of red squill.

RECLUS' OINTMENT consists of iodoform (1), salol (2), boric acid (5), antipyrin (5) and vaselin (40).

RECTOSANOL is the name adopted for hemorrhoidal suppositories said to contain as their active constituents eucaine, stovaine and adrenalin.—Mfrs.: Simon's Apotheker, Berlin C, Germany.

REGENERIN Liquid is described as an elixir of lecithin, iron and managanese. It is a clear reddish-brown solution said to contain 0.3 per cent. of lecithin, 0.5 per cent. of iron and 0.1 per cent. of manganese. It is ex-

ploited as a "blood-builder," etc. *Regenerin Powder* is constituted similarly to the liquid regenerin, but contains additional ingredients.—Mfrs.: Drs. R. & O. Weill, Frankfurt-on-M., Germany.

REGENEROL, also designated as *tabulettæ salis physiologici effervescentes* consists of "physiological salt" and effervescent sodium citrate. It is prescribed as a tonic.—Mfrs.: Apotheke Zum Heiligen Geist, Vienna, Austria.

REGULIN is a dry, tasteless preparation of agar-agar, containing 25 per cent. of aqueous extract of cascara sagrada. Dr. Schmidt endorses it as a regulator of intestinal peristalsis. Dose, 1 to 2 teaspoonfuls, in jam.—Mfrs.: Chem. Fabrik. "Helfenberg," Helfenberg, Germany; agts.: C. Reinschild Chem. Co., New York.

REMARCOL is a brand name for *sodium fluoride*.

RENADEN is a lactose tituration of dried extract of pig's kidneys, 1 part representing 2 parts of the fresh organ. It is prescribed in Bright's disease and uremia. Dose, 90 to 120 grains per day.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

RENAGLANDIN is described as a "concentrated solution of the suprarenal gland." It is used as a hemostatic, in the same classes of cases as adrenalin.

RENALINA is an Italian designation for the active principle of the suprarenal capsule described herein under *epinephrine*.

RENASEIN tablets consist, according to an analysis by E. Kahlmüller, essentially of lecithin-albumin, milk sugar and various salts of iron, magnesium, manganese, calcium, potassium and sodium.—Mfr.: Dr. Schroeder.

RENASTYPTIN is a solution of the vaso-constrictive principle of the suprarenal gland, analogous to *epinephrin*.—Mfrs.: Willones, Francis, Butler & Thompson, London, Eng.

RENNENE is "the milk-curdling principle of rennet in crystalline form". Its uses are the same as those of rennin.—Mfr.: John Wyeth & Bro., Philadelphia, Pa.

RENOCAINE is a solution of adrenalin containing also cocaine.

RENOFORM is a coryza snuff consisting of a mixture of powdered boric acid and milk sugar with 2 per cent. of dried extract of suprarenal gland.—Mfrs.: Freund & Redlich, Berlin, Germany.

RENOFORM BORICUM MIXTURE is a pulverulent mixture of boric acid, milk sugar and 1/10 per cent. of renoform (a brand of the active principle of the suprarenal capsule).

RESALDOL, $C_{20}H_{18}O_5 \cdot (CH_3CO)_2$, is an acetyl derivative of the condensation product of chlormethylsalicylic aldehyde and resorcin (saloform). It occurs as a very light,

yellowish-brown powder of very astringent taste, insoluble in water, but soluble in alkali solutions. It is intended as an intestinal antiseptic, especially in tuberculosis of the intestines. Dose, 45 to 75 grains per day, in wafers or as enemas.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

RESALGIN is the name applied to *antipyrin resorcyrate*, $(C_{11}H_{12}N_2O)_2 \cdot C_6H_4O_4$, which chemical occurs as colorless crystals freely soluble in water, and intended as an antiseptic.

RESINEON (*etheral pitch oil*) is the distillation product of crude tar oil distilled at 148° C. It has been recommended in a 1:8 ointment in chronic skin rashes.—Mfr.: E. Merck, Darmstadt, Germany.

RESOL is a crude disinfectant obtained by saponifying wood tar with caustic potash in presence of wood alcohol.

RESOPYRIN (*resorcin-antipyrin*; *resorcinopyrin*) results from mixing solutions of resorcin and antipyrin. Colorless crystals soluble in alcohol, insoluble in water. It is an antiseptic and an antipyretic. Dose, 10 to 20 grains.

RESORBIN, as its name implies, is a readily absorbed ointment-base, consisting of oil of sweet almonds, soap, white wax, lanolin, and a solution of gelatin. It is used as a vehicle in the endermic administration of mercury, iodine and other drugs. Marketed also as *resorcin-mercury*, 33⅓ per cent. and 50 per cent.—Mfrs.: Akt.-ges. für Anilin-fabrikation, Berlin SO, Germany; agts.: Lehn & Fink, New York.

RESOR-BISNOL is an intestinal antiseptic furnished in 5-grain capsules. In all probability it consists of resorcin and some bismuth salt.—Mfrs.: Resor-Bisnol Chem. Co., Baltimore, Md.

RESORBOL is a compound of iodine with higher fatty acids, for which the claim is made that it is readily absorbed by the skin. It occurs as a brown liquid of the specific gravity 1.072 and containing 10 per cent. of iodine. It is miscible in all proportions with water or alcohol. It does not stain the skin or the linen, and can be readily removed from the skin with water.—Mfrs.: Chem. Fabrik "Tlém," Lemberg, Germany.

RESORCIN-ANTIPYRIN.—See *resopyrin*.

RESORCIN-CAMPHOR is obtained by melting together equal parts of resorcin and camphor, and forms a colorless oily fluid recommended for use in pruritus and parasitic skin diseases (especially for lice).—(Nonproprietary.)

RESORCIN-EUCALYPTOL is a white powder, easily soluble in alcohol, sparingly soluble in water. Its solutions are used by inhalation in phthisis, fetid bronchitis and the like, and in ointment it is used on wounds, skin lesions, etc.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

RESORCIN - HEXAMETHYLENETETRAMINE is described under *hetralin*.

RESORCIN MONOACETATE.—See *euresol*.

RESORCIN-SALOL, obtained by melting resorcin and salol together, was introduced some years ago as an intestinal antiseptic, but never met with much favor because offering no advantages over a simple mixture of its ingredients. Dose, 3 to 10 grains.—(Nonproprietary.)

RESORCINOL (not simple resorcin also called resorcinol in U. S. P.) is obtained by melting together equal parts of resorcin and iodoform. It occurs as a brown powder of iodine odor and iodoform taste, and was introduced as a vulnerary and dermic; to be applied as a 20 per cent. dusting powder or as 6 to 12 per cent. ointments. Keep from light.—Mfr.: E. Merck, Darmstadt, Germany.

RESPIRATIN, exploited in Japan by Dr. Kitao as an asthma remedy, consists, according to R. Ishizu, essentially of 1 per cent. potassium guaiacolsulphonate and 99 per cent. milk sugar.

RESPIRAZONE is "composed of iodide and bromide of potassium, ipecac, lobelia ad leonurus cardiaca." Exploited as an antiasthmatic. Dose, a teaspoonful.—Mfrs.: Tilden Co., New Lebanon, N. Y.

RESTAUROL is a lotion exploited as excellent for refreshing the skin and strengthening the nerves. It consists, according to Drs. Lenz and Lucius, of an alcoholic solution of fragrant essential oils—something like cologne water.—Mfrs.: Dr. Max Lehmann & Co., Berlin SO, Germany.

RETINOL (*rosinol, rosin oil*) is a thick, yellow oil obtained by the distillation of rosin; specific gravity, 0.900; soluble in oils, ether, and alcohol. It is used as an ointment or liniment in skin diseases; technically as a solvent of phosphorus, salol, camphor, gums, etc. It has also been suggested as an excipient for phosphorus.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

REXINE is "a formaldehyde compound" used for the generation of formaldehyde gas without a special apparatus.—Mfrs.: Rex Fluid Co., Des Moines, Ia.

REXOTAN (*methylene-tannin-urea*) is a condensation product of tannin, urea, and formaldehyde, to which the formula $C_{16}H_{14}N_2O_{10}$ has been assigned. It occurs as a yellowish-brown, odorless, and tasteless powder; insoluble in the usual solvents and acid liquids, decomposed by alkalis with the liberation of formaldehyde. It is prescribed as an intestinal astringent and disinfectant. See caution under *formaldehyde*.—Mfr.: Dr. A. Voswinkel, Berlin, Germany.

RHACHISAN is an emulsion launched as a substitute for phosphorized cod liver oil. It is said to contain 30 per cent. of cod liver oil, together with some iodine (1 per

cent.), lecithin (0.8 per cent.), nuclein (1.75 per cent.), and iron (0.3 per cent.), with glycerin, alcohol and water.—Mfrs.: Drs. Degen & Kuth, Düren, Germany.

RHAMNAGAR is a preparation similar to regulin. The extract of cascara sagrada used in the preparation of the latter is replaced by extract of buckthorn.

RHEOL ovules consist of a preparation of yeast, and are used in leucorrhea. They are coated with paraffin, in order to protect the yeast against atmospheric influences.—Mfr.: G. Hirschfeld, Berlin C, Germany.

RHEUMABELLINSTIFT (pencil) recommended, as the name indicates, for the treatment of rheumatism, contains iodine, capsicum, camphor, menthol, rosin, yellow wax, petrolatum, oil of turpentine and oil of wintergreen. Mfr.: Apotheker Wiesengrund, Ingolstadt, Germany.

RHEUMACIDE is the generic name adopted for several preparations. *Rheumacide A* is put forward as a remedy in rheumatism, sciatica and influenza; *Rheumacide B* as a specific in gout; and *Rheumacide C* for use in renal, vesical and cutaneous affections. According to the analyses of Dr. F. Zernik, rheumacide A consists essentially of about 10 per cent. of salol, 23 per cent. of antipyrine, 9 per cent. of citric acid and 58 per cent. acetylsalicylic acid containing some free salicylic acid. Rheumacide B is composed approximately of a mixture of equal parts of salol and acetylsalicylic acid (aspirin) and 2 per cent. of citric acid. Rheumacide C consists of about 20 per cent. each of salol and antipyrine, and a mixture of acetylsalicylic acid, free salicylic acid and a small quantity of citric acid.

RHEUMACILATE is a brand of synthetic *methyl salicylate*, exploited as a topical remedy in rheumatism, 30 to 60 minims being rubbed in at a time.—Mfrs.: Fries Bros., New York.

RHEUMALGINE is a liquid antirheumatic and anti-gout remedy, each fluid dram of which contains strontium salicylate from natural acid 5 grains, hexamethylenamine 2 grains, and colchicine 1/200 grain. Also marketed as tablets containing these same drugs and quantities.—Mfrs.: Eli Lilly & Co., Indianapolis, Ind.

RHEUMAN is a medicated paper employed in rheumatism and neuralgia.

RHEUMAPHEN (*acetyl-salicylic acid methyl ester*) is intended for use in cases of rheumatism that do not bear acetyl-salicylic acid (aspirin) well on account of hyperacidity of the stomach. Dose, the same as of aspirin. Marketed also as tablets.

RHEUMASAN is a superfatted salicylic acid soap containing 10 per cent. of free salicylic acid. It is used by *inunction* in rheumatic affections, sciatica, etc., 2 to 4

drams per dose, usually in the evening.—Mfr.: Dr. Reiss, Berlin N, Germany.

RHEUMASOL (*salicylated petrovasol*) consists of 80 per cent. of vasol and 10 per cent. each of petrosulfol and salicylic acid. It is used as a paint or inunction in swollen glands, lumbago, rheumatism, etc.—Mfrs.: G. Hell & Co., Troppau, Austria.

RHEUMATIN is the name applied in Germany—and up to seven years ago also here—to *saloquinine salicylate*; see this title.—Mfrs.: Zimmer & Co., Frankfort-on-M., Germany; agts.: C. Bischoff & Co., New York.

RHEUMATISM LYMPH (Wright) is defined as an emulsion of the bacteria of rheumatism with Hayem's serum (a solution of 1 part of sodium chloride and 2 parts of sodium sulphate in 200 parts of distilled water). Each cubic centimeter is said to contain 10,000,000 bacteria. The article is used by injection in rheumatism.

RHEUMON (*collonin extensum*) is a plaster said to contain camphor, benzol, Mecca balsam, Canada balsam and fluid extract of arnica. It is spread on thin paper. It is employed topically in articular rheumatism, pleurisy, neuralgia and other painful ailments. Before applying it, the part is moistened with alcohol and the plaster put on dry. To remove it, it is moistened with alcohol.—Mfr.: T. Paraskovich, Gutenstein, Austria.

RHEUMOPATSALBE (ointment) contains menthol, methyl salicylate, ichthyol, camphor, borax, etc.

RHEUMOSE is a preparation of salicylic acid and capsicum for external use in rheumatic affections. The rubefacient action of the capsicum is said to increase the cutaneous absorption of the salicylic acid.—Mfr.: "Sicco," Berlin O, Germany.

RHINALGIN suppositories consist of alumnol, menthol, valerian oil, and cacao butter. They are used in coryza.

RHINALUM is the name applied to nasal wafers "each containing alum compound (non-irritating) 2 grains, corrosive sublimate 1/100 grain, hydrastis alkaloids 1/32 grain, ichthyol 1/30 grain, formaldehyde, lanolin, menthol and cacao butter q. s." They are used in coryza and hay-fever.—Mfr.: Norwich Pharmacal Co., Norwich, N. Y.

RHINITIN is a hay fever remedy, the active constituent of which is a preparation of the suprarenal gland. A dilute solution of it is applied with an atomizer.—Mfrs.: Hof-Apotheke, Dresden A, Germany.

RHINITIN CREME, exploited for the treatment of hay fever, is said to contain adrenalin, anesthesin, eucalyptol and petrolatum.

RHINOCULIN is a hay-fever ointment containing *subcutin* (soluble anesthesin), *paranephrin* (vasoconstrictive principle of the suprarenal capsule), glycerin and boric

acid.—Mfr.: Dr. E. Ritsert, Frankfort-on-M., Germany; agts.: C. Bischoff & Co., New York.

RHINOL, exploited for the treatment of hay fever, contains suprarenin borate, cocaine, zinc sozodolate, boric acid and menthol.—Mfr.: Dr. L. Wolff, Bielefeld, Germany.

RHINOSCLERIN (Pawlowski) is a hydro-alcoholic extract of the bacilli that cause the nasal affection known as rhinoscleroma, and is intended as a remedy for the latter.

RHODALINE. See *thiosinamine*.

RHODALLIN is a synonym of *thiosinamine*.

RHOMNOGYRE is the mercury salt of rhomnol, hence *mercury nucleinate* and thus analogous to *mercuriol*, which see for properties, uses, etc.

RHOMNOL is a French *nuclein* derived from the thymus gland, and marketed as pills and granules. For properties and uses, see *nuclein*.—Mfr.: Dr. M. Le Prince, Paris, France.

RHOMNOLINE is a nervine and dietetic, the active ingredient of which is the calcium salt of rhomnol (i. e. calcium nucleinate).—Mfr.: Dr. M. Le Prince, Paris, France.

RIMOSIN OINTMENT contains boric acid, lead acetate, mercury, zinc oxide, wool-fat, simple ointment, benzoin and vasoliment. It is used in eczema, psoriasis, wounds, etc.—Mfrs.: Drs. Trilling & Seippel, Riemke, Germany.

RINGER'S SOLUTION is an artificial blood serum employed hypodermically or by the rectum in severe burns, cramps of infants, etc. Two strengths are in vogue, the second formula following the more frequently used (see also *serums artificial*):

	I.	II.
Sodium chloride.....	7.500	9.00 grams.
Calcium chloride.....	0.125	0.24 gram.
Potassium chloride....	0.075	0.42 gram.
Sodium bicarbonate....	0.125	0.30 gram.
Distilled water.....	1000.00	1000.00 grams.
To be sterilized.		

RINGOLIN is a paste consisting of equal parts of cod liver oil and glycerin in combination with 0.3 per cent. of zinc oxide and balsam peru. It is used in eruptions and intertrigo of infants; also as a vehicle, because readily miscible with tar, oil of cade, salicylic acid, etc.—Mfr.: "Industria," Cologne, Germany.

RISICCOL is "castor oil treated by a newly discovered process which divests it of all suggestion of taste and smell and transforms it into a fine, white and palatable powder;" a mixture of equal parts of castor oil and calcined magnesia. Dose, about twice that of castor oil.—Mfrs.: *Risiccol Co.*, New York.

ROBEFERROL is described as a stable aromatic elixir of peptonized iron and manganese.—Mfr.: Apotheker Rosenberg, Misdroy, Germany.

ROBOL is described as a digestive powder and tonic at the same time. Its composition is unknown.

ROBORAT is an albuminous nutrient occurring as a whitish, odorless, and nearly tasteless powder. Dose, daily 2 to 4 tablespoonsfuls mixed with food.—Mfr.: H. Niemöller, Gütersloh, Germany.

ROBORIN is a black, granular, nearly tasteless, odorless powder, prepared from blood and recommended for anemia, scrofula and general debility.—Mfrs.: Deutsche Roborin-Werke, Friedrichsberg, Germany.

ROBUSTON is a dried extract of malt and milk, that keeps well and is recommended as a palatable nutritive.

ROBYLAN is said to contain lecithin albumin and organically combined iron. It is prepared from iron albuminate, saccharated iron and lecithin-albumin, and is marketed in the form of tablets. It is recommended as an appetizer, etc.—Mfrs.: Darman Werk, Offenbach, Germany.

RODAGEN is a 50 per cent. lactose trituration of a substance obtained from the milk of thyroidectomized goats and used as a remedy in Basedow's disease (exophthalmic goiter). Dose, 75 to 150 grains per day.—Mfrs.: Vereinigte Chem. Werke, Charlottenburg, Germany; agts.: V. Koechl & Co., New York.

ROMARIN is a nutritive occurring as a white, alkaline powder of aromatic odor, and having, according to Dr. Aufrecht, the following composition: water 6.47 per cent.; albumin 6.8 per cent.; fat (ether-extract) 0.08 per cent.; cane sugar 46.12 per cent.; starch 4.16 per cent.; salts 36.37 per cent. The salts consist preponderantly of alkali carbonates, phosphates and sodium chloride, besides small quantities of sulphates, calcium oxide and magnesia.—Mfr.: Dr. Rich. Jeschke, Berlin, Germany.

RONOZOL is brand name for a series of salts identical with the older group of preparations designated as *sozodiodole*. See the latter heading.—Mfr.: Dr. A. Voswinkel, Berlin W, Germany.

ROSAPLAST is the name applied to a white zinc oxide rubber plaster spread on pink cheese cloth.—Mfr.: Geo. König, Bückeburg, Germany.

ROSINOL.—See *retinol*

RUBERALBINE is a tonic said to contain formates, methylarsenates, etc. See caution regarding formates under formaldehyde.—Mfr. Pinchon, St. Omer, France.

RUBIDIUM salts have come into some vogue in recent years as substitutes for the corresponding potassium salts, the claim being made that they do not affect the stomach or heart deleteriously. Chief among them are the follow-

ing: *Rubidium bromide*, RbBr , colorless crystals or a white powder, soluble in water. Dose, 5 to 15 grains. *Rubidium iodide* RbI , white crystals freely soluble in water. Dose, 2 to 10 grains. *Rubidium and ammonium bromide*, $\text{RbBr} \cdot 3\text{NH}_4\text{Br}$, a yellowish-white powder soluble in water. Dose in epilepsy, 60 to 100 grains per day.—(Nonproprietary.)

RUBROL is a solution of thymol and boric acid in a coal tar derivative of unknown composition. It is employed in gonorrhea.

RUFIGALLIC ACID TETRAMETHYL ESTER.—See *exodin*.

RUSSOL is a gout and rheumatism liniment containing methyl salicylate, capsicin, colchicum, chloroform and mustard spirit.—Mfr.: Dr. E. Bloch, Basle, Switzerland.

S

SABBATIN is a glucoside of the plant *sabbatia* *Ellioti*, occurring as a brownish powder soluble in water and alkali solutions. It is used as an antiperiodic.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

SABROMINE is defined as *calcium dibrombehenate*, $\text{C}_{21}\text{H}_{42}\text{O}_2\text{Br}_2\text{Ca}$. It occurs as an odorless, white, tasteless powder, and is said to contain about 20 per cent. of bromine and about 3.3 per cent. of calcium. It is insoluble in water or alcohol but soluble in ether. It is offered as a succedaneum for the alkali bromides. Dose, same as of potassium bromide.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

SACCHARIN, now official under the name *benzo-sulphinide*, will be but briefly referred to, only such statements being made as may not be generally known to pharmacists and physicians. It is chemically definable as *benzoyl-sulphonic imide*, *ortho-sulphamine-benzoic anhydride*, *benzoic-acid sulphinide*; and is known in the trade also as *agucarina*, *garantose*, *gluside*, *neosaccharin*, *saccharinol*, *saccharinose*, *saccharol*, *sazine*, *sybose*, *toluol sugar*, *zuckerin*, etc. The refined or regular saccharin is an acid, sparingly soluble in water (1:400), but dissolving in 30 parts of alcohol. *Soluble saccharin* (*crystallose*, etc.) is the sodium salt of saccharin pure, containing about 90 per cent. of the latter. While its uses are chiefly as a sweetening agent, it is occasionally prescribed as an acidifier of the urine in cystitis, as it is eliminated from the system unchanged. Dose, 2 to 5 grains in capsules with water.

SACCHARINOL, **SACCHARINOSE**, and **SACCHAROL** are synonyms of *saccharin*.

SACCHAROSOLVOL is an organo-therapeutic preparation obtained by the action of salicylic acid upon the di-

astatic ferment of pancreatic juice and spinal marrow of cattle. It is employed in diabetes. Dose, a teaspoonful three times a day—Mfr.: A. Meissner, Oppeln, Germany.

SAGRADIN is a 20 per cent. solution of bitterles extract of cascara, to which 2 per cent. of peppermint spirit has been added. Dose, $\frac{1}{2}$ to 1 teaspoonful.

SAGRADOL is a bitterless extract of cascara sagrada with 2 per cent. of quinine.

SAHIR is a chewing gum containing protocatechuic acid phloroglucinerster and used for the treatment of diseases of the gums.—Mfr.: Ludw. Seysburg, Munich, Germany.

SAJODIN $(C_{21}H_{42}IOO)_2Ca$, is defined as *calcium moniodobehenate*. It occurs as a white, odorless, tasteless powder, containing about 26 per cent. of iodine, insoluble in water, and turning yellow on exposure to light. It is intended as a substitute for the iodides when these are not well borne. Dose, 15 to 30 grains three times daily.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

SAL ANÆSTHETICUM SCHLEICH is used for "infiltration anesthesia" as introduced by Dr. Schleich of Berlin. It is marketed as tablets, in three strengths: *strong*, containing cocaine hydrochloride 0.2 gram, morphine hydrochloride 0.025 gram, and sodium chloride 0.2 gram; *normal*, containing cocaine hydrochloride 0.1 gram, morphine hydrochloride 0.025 gram, and sodium chloride 0.2 gram; and *weak*, containing cocaine hydrochloride 0.01 gram, morphine hydrochloride 0.005 gram, and sodium chloride 0.2 gram. For use, 1 tablet is dissolved in 100 c.c. of sterilized water.—Mfrs.: Vertriebsges. Prof. Schleich, Berlin, Germany.

SAL DE BATES is said to contain the constituents of a spring water similar to that of the Bates springs. The essential constituent is a radio-active compound of uranium and barium. When freshly prepared it possesses a strong emanation, but it loses this gradually. It is employed in diabetes, usually combined with fluidextract of horn poppy.

SAL-ETHYL is a trade name given to pure *ethyl salicylate* or *salicylic ether*, recently recommended as a substitute for methyl salicylate and wintergreen oil internally in rheumatism, tonsillitis, neuralgia, etc. See ethyl salicylate. Marketed as 5-minim globules.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

SAL GREGORY is a mixture of morphine hydrochloride (97½ per cent.) and codeine hydrochloride (2½ per cent.); a white powder freely soluble in water and employed like morphine hydrochloride and in about the same doses.—(Nonproprietary.)

SAL LAXA is a granular effervescent laxative salt "containing sodium sulphate 32 parts, sodium phosphate 30

parts, potassium and sodium tartrate 24 parts, lithium carbonate 2 parts and caffeine $\frac{1}{4}$ part, combined with fruit acid."—Mfrs.: Sharp & Dohme, Baltimore, Md.

SAL PHYSIOLOGICUM POEHL is a white powder, readily soluble in water, and containing all the active constituents of blood serum. A 1.5 per cent. solution corresponds in saline content to blood serum. It is used for transfusions, also in irrigations and sprays for catarrhal inflammations (coryza, cystitis, etc.).—Mfrs.: Dr. A. v. Poehl & Sons, St. Petersburg, Russia; agts.: Lehn & Fink, New York.

SAL PURGANS is what *artificial Carlsbad salt* (sal Carolinum facitium) is called in Austria.

SAL RENALINE is a laxative salt containing as a base "the active salts contained in European bitter waters, sodium phosphate, lithium phosphate and renaline" (hexamethylenetetramine). It is used mainly in gout, rheumatism and Bright's disease. See caution under *formaldehyde*—Mfrs.: Independent Pharm. Co., Worcester, Mass.

SAL URISEPTIC is a granular effervescent salt, of which "each dessertspoonful in solution contains $7\frac{1}{2}$ grains of hexamethylenamine and 3 grains of lithium borocitrate." As its name indicates, its action is that of a urinary antiseptic and antilithic. Dose, 1 to 2 drachms.—Mfrs.: John Wyeth & Bro., Philadelphia, Pa.

SALACETIN is defined as "a combination, with heat, of salicylic and glacial acetic acids with phenylamine" (anilin). According to analyses made at the chemical laboratory of the American Medical Association, it is "a mixture of acetanilid 43 parts, sodium bicarbonate 21 parts, and sodium salicylate 20 parts." It is an antirheumatic and analgesic, used principally as an ingredient of "sal-codeia" (salacetin 5 grains, codeine $\frac{1}{4}$ grain).—Mfrs.: Bell & Co., Orangeburg, N. Y.

SALACETOL (*salicylacetyl*; *salantol*; *acetyl-salicylic-acid ester*), $C_6H_4.OH.CO.OCH_2CO.CH_3$, occurs as white to faintly reddish fluffy, bitter needles, readily soluble in alcohol, chloroform, and ether, but sparingly soluble in water. It is prescribed as an intestinal antiseptic and antirheumatic. Dose, 15 to 45 grains, often with 1 ounce of castor oil.—Mfrs.: Hofmann & Schöten sack, Ludwigshafen, Germany.

SALACOLL. See *phenocoll salicylate*.

SALACTOL is described as a solution of sodium salicylate and sodium lactate in 1 per cent. solution of hydrogen peroxide. It is used chiefly as a paint in diphtheria; also internally.

SALAMID is said to be made by the action of dry ammonia gas upon oil of birch and to have the formula $C_6H_4.OHCONH_2$. It is sparingly soluble in water and acid liquids, but soluble with decomposition in alkali solutions such as the intestinal juice. In action and therapeutic

uses it is analogous to salicylic acid but is claimed to be better borne.—Mfr.: Wm. S. Merrell Chem. Co., Cincinnati, O.

SALANTOL.—See *salacetol*.

SALAZOLON is a synonym of *salipyrine*.

SALBROMALID is *antinervin*.

SALEN is a mixture of the methyl and ethyl glycolic acid esters of salicylic acid; an odorless, oily fluid readily soluble in alcohol, ether or castor oil, sparingly soluble in olive oil, and insoluble in water. It is used as an inunction in rheumatism, either undiluted or mixed with olive and castor oil or with chloroform and olive oil.—Mfrs.: Gesellschaft für Chem. Industrie, Basle, Switzerland; agts.: A. Klipstein & Co., New York.

SALETIN is an English trade name for *acetylsalicylic acid*, better known on the American market under the name of *aspirin*.

SALHYPNOL is the name applied to *benzoyl-methyl-salicylic acid ester*, which forms colorless needles, slightly soluble in alcohol and ether, and insoluble in water. Its action is analogous to that of salacetol. Dose, 5 to 15 grains.—Mfr.: Dr. A. Voswinkel, Berlin W, Germany.

SALIBROMINE is, chemically, *dibromo-salicylic acid methyl ester*, $C_6H_4Br_2.OH.COCH_3$. It occurs as a white, slightly odorless powder, and is employed as an antipyretic and antirheumatic in doses of 8 grains four to ten times daily.

SALICOL is a French cosmetic antiseptic, consisting of a solution of salicylic acid and wintergreen oil in methyl alcohol and water. Methyl alcohol, it is now well known, is highly poisonous, causing blindness, and it may injure the eyes even by its vapor.

SALICYL-ALPHA-METHYL-PHENYL-HYDRAZON is the chemical designation of *agathin*.

SALICYLAMIDE $C_6H_4(OH)CONH_2$, is obtained by causing dry ammonia to act upon methyl salicylate. It occurs as colorless or yellowish, tasteless plates, soluble in alcohol, ether or chloroform, only sparingly soluble in water. It is used mainly as an analgesic, in rheumatism, gout, etc. Dose, $2\frac{1}{2}$ to 5 grains every 3 or 4 hours, in solution. Maximum daily dose, 15 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

SALICYLANILID is a synonym of *salifebrin*.

SALICYL-FORMALDEHYDE.—See *formasal*.

SALICYLIC ACID ACETYL-PARA-AMIDOPHENOL ESTER.—See *salophen*.

SALICYLIC ACID AMYL ESTER is a synonym of *amyl salicylate*; see this title.

SALICYLIC ACID BETA-NAPHTOL ESTER is referred to under *betol*.

SALICYLIC ACID ESTER OF SALICYLIC ACID. See *diplosal*.

SALICYLIC ACID GLYCERIN ESTER.—See *glycosal*.

SALICYLIC ACID METHOXY-METHYL ESTER is a chemical designation for the article marketed as *mesotan*.

SALICYLIC ACID METHYL ESTER is described under *salithymol*.

SALICYLIC ACID PARA-CHLORPHENYL ESTER.—See *chlorsalol*.

SALICYLIC-ACID-PARA-PHENETETID is better known by the trade name, *phenesol*

SALICYLIC ACID PHENYL ESTER is *salol*.

SALICYLOS is a granular effervescent salt, each dessertspoonful of which is said to contain 10 grains each of strontium and ammonium salicylates, with an excess of sodium bicarbonate. It is used as an antirheumatic, antipodagric and analgesic. Dose, 1 to 2 dessertspoonfuls.—Mfrs.: H. K. Mulford Co., Philadelphia, Pa.

SALICYL-PARA-PHENETIDIN is described under its trade name, *malakin*.

SALICYL-PHENETIDIN is given as a synonym of *saliphen*.

SALICYL-QUININE.—See *saloquinine*.

SALICYL-RESORCIN-KETONE (*trioxyphephone*), $C_{13}H_{10}O_6$, occurs as white or reddish-white leaflets, slightly soluble in water and alcohol, and used as an intestinal antiseptic and antirheumatic, in doses of 5 to 15 grains, 3 or 4 times daily. Maximum dose, 15 grains, or 60 grains per day.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

SALIFEBRIN (*salicylanilid*) is defined as a condensation product of salicylic acid and acetanilid (antifebrin), but is probably a fused mixture of the two components. It is prescribed as an anodyne and antipyretic. Dose, 5 to 15 grains.—Mfr.: Apotheker Radlauer, Berlin, Germany.

SALIFORMIN (*formin salicylate*; *hexamethylenetetramine salicylate*), $C_6H_{12}N_4 \cdot C_6H_4.OH.CO_2H$, occurs as a white powder of acidulous taste, and readily soluble in water and alcohol. It is prescribed as a genito-urinary disinfectant and gout remedy. Dose, 5 to 10 grains 3 or 4 times daily, in water. See caution under *formaldehyde*.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

SALIGALLOL (*pyrogallol diacetate*) is a resinous solid marketed in 33 $\frac{1}{3}$ per cent. solution in acetone, which is miscible with acetone and chloroform. It is a skin varnish of mild pyrogallol effect, but used chiefly as a vehicle for other dermics, such as eugallol and eurobin. Applied in 2 to 15 per cent. solutions.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

SALIGENIN.—See *diathesis*.

SALIGENIN TANNATE is described under *antiarthrin*.

SALIMENTHOL, defined by the manufacturers as *salicylic acid menthol ester*, is said to consist of a fused mixture of approximately equal parts of menthol and salicylic acid. It occurs as a light-yellow liquid, of faint pleasant odor and almost tasteless. It is used externally as well as internally, as an analgesic and anodyne, in chronic rheumatism, myalgia, toothache, etc. A 25 per cent. ointment of it is marketed under the name *samol*. Dose, 4 to 8 minims in capsules.—Mfr.: Dr. B. Bibus, Vienna I, Austria.

SALINAPHTOL is a synonym of *betol*, which see.

SALINATES is a granular effervescent saline laxative and hepatic stimulant, "each dessertspoonful of which represents 120 grains of the combined salines magnesium sulphate, sodium sulphate and sodium phosphate." Dose: 2 drachms.—Mfr.: John Wyeth & Bro., Philadelphia, Pa.

SALIODIN is said to be an "iodated aceto-salicylate, with adjuvants; a combination of salicylic acid, iodine, acetic acid, aconite, bryonia, colchicum, capsicum and gaultheria. Each 20 grains of saliodin contains approximately salicylic acid (aceto-salicylate) 15 grains; iodine (iodate) equivalent to potassium iodide 15 grains; acetic acid (acetate) equivalent to potassium acetate 5 grains; aconite equivalent to 4 drops of the tincture; bryonia equivalent to 5 drops of the tincture; colchicum root equivalent to 15 drops of the tincture; capsicum equivalent to 2 drops of the tincture; oil gaultheria 3 minims." According to analyses made at the chemical laboratory of the American Medical Association, saliodin is a mixture approximately of sodium salicylate 57.34 per cent. potassium iodide 1.18 per cent., potassium acetate 30 per cent., matter volatile at 130° (oil anise, oil gaultheria, moisture, etc.) 8.1 per cent., extractive 3.18 per cent. It occurs as a grayish-pink powder, having an odor of anise and soluble in 3 parts of water. It is used in rheumatism, gout, syphilis, and other diseases in which salicylic acid and iodine are indicated. Dose, 10 to 30 grains.—Mfr.: Saliodin Chem. Co., Scranton, Pa.

SALIPHEN (not salophen), also designated as *saliphenin* and *salicyl-phenetid*, occurs as colorless crystals readily soluble in alcohol and almost insoluble in water. It is occasionally prescribed as a mild antipyretic and analgesic. Dose, 8 to 20 grains.

SALIPHENOL.—See *phenosalyl*.

SALIPIN is an ointment containing 10 per cent. of salicylic acid and 10 per cent. of ethereal oils, used as an inunction in rheumatic affections.

SALIPINES are superfatted, liquid soap and gelatin preparations, medicated with iodine, gualacol and sal-

cyclic acid respectively. They are intended for use endermically like the vasogens.—Mfr.: Dr. K. Aschoff, Bad Kreuznach, Germany.

SALIPYRINE (*antipyrin salicylate*; *salazolone*; *salipyrzolon*), $C_{11}H_{11}N_2O_2C_6H_4O_2$, is a white, odorless powder, of sweetish taste with bitter after-taste; soluble in 250 parts of water, readily in alcohol, chloroform and ether. It contains 57.7 per cent. of antipyrin and 42.3 per cent. of salicylic acid. It is an analgesic and antirheumatic prescribed largely in grip, neuralgia and rheumatic affections. Dose, 8 to 30 grains in cachets or capsules, or as mixture rubbed up with a little glycerin and flavored with raspberry syrup.—Mfrs.: J. D. Riedel Co., Berlin (Germany) and New York.

SALIT is the terse name given to *borneol salicylic acid ester*, $C_{10}H_{17}O.COC_6H_4OH$. The article occurs as an oily liquid miscible in all proportions with alcohol, ether and fatty oils, slightly soluble in glycerin, and insoluble in water; alkalies decompose it into salicylic acid and borneol. It is prescribed as a topical antirheumatic and anodyne, usually diluted with an equal part of olive oil, which mixture is marketed as "*salitum solutum*." Dose, as a paint or by inunction, 20 to 40 minims twice daily.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

SALIT CARTRIDGES AND SALOCREOL CARTRIDGES are recommended under the name "antirheumatin" (hitherto applied to difluordiphenyl ointment made by a different firm) as a convenient form of administering the medicaments in question. Both cartridges are prepared like the well known menthol pencils or cones, but containing salit and salocreol, respectively. The salit cartridges are applied mainly in rheumatism; the salocreol cartridges in rheumatism and in erysipelas, glandular swellings, etc.—Mfr.: W. Newiger, Berlin-Reinickendorf, Germany.

SALITANNOL is a condensation product of salicylic and tannic acids, of the formula $C_{14}H_{10}O_7$, and occurring as a white powder insoluble in the usual solvents, but soluble in caustic alkalies. It combines the antiseptic action of salicylic acid with the astringent action of tannin. It is used on wounds and in intestinal catarrh. Dose, 15 grains three or four times daily.—Mfr.: O. Daebner, Halle, Germany.

SALITHYMOL (*thymyl salicylate*; *salicylic acid thymyl ester*), $C_6H_5.CH_3.C_3H_7O.COC_6H_4(OH)$, results from the action of phosphorus oxychloride or trichloride upon sodium thymolate and sodium salicylate. It forms a white, sweetish powder, almost insoluble in water, but readily soluble in alcohol and ether. It is employed as an intestinal antiseptic in the same doses as salol.

SALOCHININ.—See *saloquinine*.

SALOCOLL (*phenocoll salicylate*), $C_{17}H_{20}N_2O_6$, occurs as white needles of a sweetish taste and soluble in hot water. It is prescribed as an antipyretic and anodyne in fevers, rheumatism, neuralgias, etc. Dose, 10 to 20 grains several times daily.—Mfr.: E. Schering, Berlin, Germany; agts.: Lehn & Fink, New York.

SALOCREOL is defined as a compound of the various phenols of beechwood creosote with salicylic acid, forming esters; so-called *creosote salicylic acid ester*. It occurs as a brown, oily, nearly odorless, neutral liquid, readily soluble in olive oil, alcohol, ether and chloroform, insoluble in water, and saponified by alkalis, alcohol or glycerin on prolonged contact. It is used topically in facial erysipelas, chronic rheumatism, adenitis, lumbago, etc., as a paint or by inunction, in quantities of 45 to 180 minims one or more times daily, up to 1 fluid ounce per day. The skin should be perfectly dry before applying the salocreol, else an emulsion will be formed that prevents the penetration of the drug.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

SALOFORM is described as a chemical compound of hexamethylenetetramine (formin, urotropin, etc.), salicylic acid and lithium. It is used as a uric acid solvent and urinary disinfectant, in gout, cystitis, etc. Dose, 10 grains four times daily. Marketed also as 5-grain tablets and elixir (teaspoonful per dose). See caution under *formaldehyde*—Mfrs.: Robinson-Pettit Co., Louisville, Ky.

SALOLACETAMIDATE is an analogue of *salophen* made by A. Voswinkel, Berlin W, Germany.

SALOGEN is a ferruginous mineral water salt, for use in the bath.

SALOL-CAMPHOR (*camphorated salol*) is a mixture of 3 parts of salol with 1 part of camphor; a yellowish, oily liquid, soluble in alcohol, ether, chloroform and oils. It is used almost wholly externally, chiefly as a local anesthetic in toothache, neuralgia, etc., but also in certain skin diseases and otorrhea. Dose, 3 to 10 grains (in typhoid fever, etc.). It should be kept well stoppered.—(Non-proprietary.)

SALOL-CHLORAL, put forward as a hypnotic and antiseptic, is said to be a combination of chloral and salol.

SALOPHEN (*salicylic acid acetyl-para-amido-phenol ester*; *acetyl-para-amido-salol*; *acet-amido-salol*; *acetyl-para-amido-phenyl salicylate*), $C_{16}H_{13}OH.COO.C_6H_4.NH.COCH_3$, is obtained from salicylic acid nitrophenylic ester by reduction and acetylation. It forms a white, odorless, tasteless powder, practically insoluble in water, but readily soluble in alcohol, chloroform and ether; it contains 51 per cent. of salicylic acid. Alkalis decompose it, and should hence not be dispensed with it. It is used as an *anodyne*, antipyretic, and antiseptic, in rheumatism, grip,

typhoid fever, etc. Dose, 5 to 15 grains three or four times daily; externally in 10 per cent. ointment.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

SALOQUININE (*salochinin; salicyl-quinine; quinine salicylic acid ester*) has the formula $C_6H_4.OH.CO.O.C_{20}H_{21}O$, and occurs as a whitish, tasteless powder, insoluble in water, soluble in acidulated water, chloroform and hot alcohol, sparingly soluble in ether and cold alcohol. It is an analgesic, antiperiodic, and antipyretic, analogous to quinine. Dose, 10 to 30 grains, one to three times daily, as powders usually; in fever, it is often followed by a little hydrochloric acid and water.—Mfrs.: Fr. Bayer & Co., Elberfeld, Germany; agts.: Farbenfabriken of Elberfeld Co., New York, and Merck & Co., New York.

SALOQUININE SALICYLATE, known abroad also as *rheumatin*, $C_{26}H_{34}N_2O_8$, occurs in the form of a white, tasteless crystalline powder, sparingly soluble in water, but soluble in chloroform. It is recommended as an antirheumatic and antineuralgic, in doses of 15 to 20 grains three times daily.—Mfrs.: Zimmer & Co., Frankfort-on-M.; agts.: Merck & Co., New York.

SALORICOL is the name given to soft capsules containing 5 grains of salol and 5 grains of castor oil.—Mfr.: Knapp's Drug Store, New York.

SALOSANTAL (*oleum salosantali*) is a 33⅓ per cent. solution of salol in oil of sandalwood and a little peppermint oil. It is used internally in gonorrhea. Dose, 5 to 15 minims, in capsules or on sugar. Marketed also in 0.3 and 0.5 gram capsules.—Mfr.: Dr. Halle, Schöneberg, Germany.

SALOSIT is described as an organic compound of phosphorus, calcium and magnesium.

SALAZON is a bath salt, advertised as being disinfectant and stimulating to the skin.—Mfrs.: J. F. Heyl & Co., Berlin W, Germany.

SALTARIN consists, according to published statements, of 10 parts of magnesium sulphate, 52 of sodium sulphate, 1.6 of potassium sulphate, 28 of sodium bicarbonate, 13 of sodium chloride, 0.2 of lithium carbonate and 7 of calcium phosphate. It is exploited as a "blood purifier."—Mfr.: Otto Reichel, Berlin SO, Germany.

Another *saltarin*, also known as compound extract of jambul Dr. Schütz, is a diabetes remedy made by Dr. Schütz & Co., Bonn, Germany.

SALUBRIN is a liquid antiseptic and astringent composed of acetic acid (2), alcohol (50), acetic ether (25), and water (23). Dose, a teaspoonful in water, four times a day. Applied externally pure or in 1 in 10 solution.

SALUBROL is chemically *methylene-tetrabromdiantipyrin*, $C_{22}H_{24}Br_4N_4O_2$. It occurs as a permanent, almost odorless powder, soluble in alcohol. It is employed as a wound

SALOCOLL (*phenocoll salicylate*), $C_{17}H_{15}NO_3$, occurs as white needles of a sweetish taste and soluble in hot water. It is prescribed as an antipyretic and anodyne in fevers, rheumatism, neuralgias, etc. Dose, 10 to 20 grains several times daily.—Mfr.: E. Schering, Berlin, Germany; agts.: Lehn & Fink, New York.

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SALUBRIN is a liquid antiseptic and astringent composed of acetic acid (2), alcohol (50), acetic ether (25), and water (23). Dose, a teaspoonful in water, four times a day. Applied externally pure or in 1 in 10 solution.

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SALOCOLL (*phenocoll salicylate*), $C_{12}H_{10}NO_2$, occurs as white needles of a sweetish taste and soluble in hot water. It is prescribed as an antipyretic and anodyne in fever, rheumatism, neuralgias, etc. Dose, 10 to 20 grains several times daily.—Mfr.: E. Schering, Berlin, Germany; agts.: Lehn & Fink, New York.

SALOCREOL is defined as a compound of the various phenols of beechwood creosote with salicylic acid, forming esters; so-called *creosote salicylic acid ester*. It occurs as a brown, oily, nearly odorless, neutral liquid, readily soluble in olive oil, alcohol, ether and chloroform, insoluble in water, and saponified by alkalis, alcohol or glycerin on prolonged contact. It is used topically in facial erysipelas, chronic rheumatism, adenitis, lumbago, etc., as a paint or by insunction, in quantities of 45 to 180 minims one or more times daily, up to 1 fluid ounce per day. The skin should be perfectly dry before applying the salocreol, else an emulsion will be formed that prevents the penetration of the drug.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

SALOFORM is described as a chemical compound of hexamethylenetetramine (formin, urotropin, etc.), salicylic acid and lithium. It is used as a uric acid solvent and urinary disinfectant, in gout, cystitis, etc. Dose, 10 grains four times daily. Marketed also as 5-grain tablets and elixir (teaspoonful per dose). See caution under *formaldehyde*—Mfrs.: Robinson-Pettit Co., Louisville, Ky.

SALOLACETAMIDATE is an analogue of salophen made by A. Voswinkel, Berlin W, Germany.

SALOGEN is a ferruginous mineral water salt, for use in the bath.

SALOL-CAMPHOR (*camphorated salol*) is a mixture of 3 parts of salol with 1 part of camphor; a yellowish, oily liquid, soluble in alcohol, ether, chloroform and oils. It is used almost wholly externally, chiefly as a local anesthetic in toothache, neuralgia, etc., but also in certain skin diseases and otorrhea. Dose, 3 to 10 grains (in typhoid fever, etc.). It should be kept well stoppered.—(Non-proprietary.)

SALOL-CHLORAL, put forward as a hypnotic and antiseptic, is said to be a combination of chloral and salol.

SALOPHEN (*salicylic acid acetyl-para-amido-phenol ester; acetyl-para-amido-salol; acet-amido-salol; acetyl-para-amido-phenyl salicylate*), $C_{12}H_{10}OH.COO.C_6H_4.NH.COCH_3$, is obtained from salicylic acid nitrophenylic ester by reduction and acetylation. It forms a white, odorless, tasteless powder, practically insoluble in water, but readily soluble in alcohol, chloroform and ether; it contains 51 per cent. of salicylic acid. Alkalis decompose it, and should hence not be dispensed with it. It is used as an anodyne, antipyretic, and antiseptic, in rheumatism, gr/

typhoid fever, etc. Dose, 5 to 15 grains three or four times daily; externally in 10 per cent. ointment.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

SALOQUININE (*salochinin*; *salicyl-quinine*; *quinine salicylic acid ester*) has the formula $C_{20}H_{21}OH.COOC_{20}H_{21}O$, and occurs as a whitish, tasteless powder, insoluble in water, soluble in acidulated water, chloroform and hot alcohol, sparingly soluble in ether and cold alcohol. It is an analgesic, antiperiodic, and antipyretic, analogous to quinine. Dose, 10 to 30 grains, one to three times daily, as powders usually; in fever, it is often followed by a little hydrochloric acid and water.—Mfrs.: Fr. Bayer & Co., Elberfeld, Germany; agts.: Farbenfabriken of Elberfeld Co., New York, and Merck & Co., New York.

SALOQUININE SALICYLATE, known abroad also as *rheumatin*, $C_{20}H_{21}N_3O_5$, occurs in the form of a white, tasteless crystalline powder, sparingly soluble in water, but soluble in chloroform. It is recommended as an antirheumatic and antineuralgic, in doses of 15 to 20 grains three times daily.—Mfrs.: Zimmer & Co., Frankfort-on-M.; agts.: Merck & Co., New York.

SALORICOL is the name given to soft capsules containing 5 grains of salol and 5 grains of castor oil.—Mfr.: Knapp's Drug Store, New York.

SALOSANTAL (*oleum salosantali*) is a 33⅓ per cent. solution of salol in oil of sandalwood and a little peppermint oil. It is used internally in gonorrhea. Dose, 5 to 15 minims, in capsules or on sugar. Marketed also in 0.3 and 0.5 gram capsules.—Mfr.: Dr. Halle, Schöneberg, Germany.

SALOSIT is described as an organic compound of phosphorus, calcium and magnesium.

SALOZON is a bath salt, advertised as being disinfectant and stimulating to the skin.—Mfrs.: J. F. Heyl & Co., Berlin W, Germany.

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antiseptic like iodoform. See caution under *formaldehyde*. It is no longer on the market.

SALUFER is a name sometimes applied to *sodium silico-fluoride*.

SALUMIN is described under *aluminium salicylate*. Soluble *salumin* is *aluminium* and *ammonium salicylate*.—Mfrs.: J. D. Riedel Co., Berlin (Germany) and New York.

SALUSOL is a liquid antiseptic described by the manufacturers in the following language: "A soluble distillate of alkyl acetates and the strongly antiseptic volatile oils, forming a compound spirit of acetic ether."

SALUTINE is described as "a combination of 'carbonylphenylacetates,' from oil of *betula lenta* with the active principles of *paulinia sorbilis* and *theobroma cacao*." It occurs as colorless crystals, of slightly bitter-acidulous taste, practically insoluble in water and dilute acids, but soluble in alcohol and alkaline liquids. It is intended as a succedaneum for sodium salicylate. Dose, 5 to 20 grains three or four times a day, before meals. Marketed also as 5-grain tablets.—Mfrs.: Yale Chem. Co., New York.

SALVARSAN is the trade name for Ehrlich's "606," *di-oxydiaminoarsenobenzol*, which is described under its chemical name.

SALVIN is a creamy emulsion of a compound of silica and wax, which when applied to the skin is said to penetrate rapidly and form a thin coating on the epidermis that prevents infection during operations, examinations, etc. It is used also in intertrigo, eczema, bed sores, etc.—Mfr.: "Pharmaco," Lippspringe, Germany.

SALVIN is also the name applied to "*salviol essence* containing 10 per cent. of menthol-salol-glycerin; an aromatic alcoholic sage-rhatany-salol-glycerin essence;" a preparation used as a gargle in diseases of the throat and as a prophylactic against diphtheria in times of epidemic.—Mfr.: Apotheker Lakemaler, Cologne, Germany.

SAMOL. See under *salimenthol*.

SANAL (Müller) is a reddish-brown ointment consisting of litharge, red bole, calamine, balsam of peru, yellow wax, and vaselin. It is employed in rheumatism, gout, etc.

SANAS is a glycerin extract of cod livers, prepared, it is stated, by washing the fresh livers with sterilized water, and then macerating them with glycerin for forty-eight hours, expressing, straining, setting aside until two layers have formed, drawing off the lower (glycerin) layer, filtering and sterilizing it.

SANATOGEN is a glycerinophosphated sodium-casein, readily soluble in water, and recommended as a food and a nerve nutrient. It consists of 5 per cent. of sodium glycerinophosphate and 95 per cent. of casein. Dose, 1 to 1½ ozs. daily, in warm milk, etc.—Mfrs.: Bauer & Co., Berlin SO (Germany) and New York.

SANATOL (not sanitol, a preparation used as a mouth-wash) is a general disinfectant occurring as a dark brownish-black fluid smelling of crude carbolic acid and sulphurous acid. Its solutions in water are turbid.—Mfr.: H. Leonhardt, Zwickau, Germany.

SANATOLYN is an Austrian crude disinfectant similar to sanitol.

SANAX is a coal-tar disinfectant and deodorant for general use.—Mfr.: Sharpe & Dohme, Baltimore, Md.

SANGALBUMIN is an acid, peptonized blood-albumin, soluble in water, and claimed to be identical with the better-known *hemalbumin*—Mfrs.: "Sicco," Berlin O, Germany.

SANGAN is the name now applied to *heman*.

SANGOEN CAPSULES are said to contain iron, arsenic, manganese, and strychnine—"all in organic form, all predigested." They are prescribed as a blood and nerve tonic. Dose, 1 or 2 after each meal.—Mfrs.: Kreuzberg-Apotheke, Berlin SW, Germany.

SANGOSTOL (*liquor calcii iodo-ferrati*) is an iron and lime preparation intended for use chiefly for rachitic and scrofulous children. Dose (children), $1\frac{1}{2}$ to 1 teaspoonful after meals.

SANGUIFORM is a liquid hematinic obtained from fresh ox-blood. It is advertised as containing in each fluid ounce, "2½ grains of natural organic iron, together with all the albuminous and saline constituents of 1¼ ounces of normal healthy blood." Dose, 1 to 2 teaspoonfuls, in water.—Mfrs.: John Wyeth & Bro., Philadelphia, Pa.

SANGUINAL is a hematinic prepared from blood, and consists, according to the manufacturers, of pure crystalline hemoglobin 10 per cent., natural salts of the blood 46 per cent., and freshly prepared peptonized muscle albumin 44 per cent., with a trace of manganese. Marketed only as pills, each representing 5 grams of blood; also in pills combined with gualacol carbonate; with creosote; with rhubarb extract; with helol; with quinine, etc. Dose, 2 to 5 pills three times a day, before meals.—Mfrs.: Krewel & Co., Cologne, Germany; agts.: Lehn & Pink, New York.

SANGUINO TABLETS are stated to contain all the iron salts, albumins, fats and carbohydrates existing in the animal organism, in the form in which they occur in the blood, but in 5 times the proportion; apparently simply evaporated blood. Dose, 2 to 4 tablets before meals.

SANGUINOFORM is a reddish-yellow powder, said to be prepared from "embryonic blood-forming organs" (bone-marrow, spleen, etc.), with the addition of cacao and peppermint oil. It is employed as a "blood-builder" and invigorator in chlorosis, rickets, convalescence, etc.

Dose, $\frac{1}{2}$ teaspoonful three times a day.—Mfr.: Dr. W. Wartenberg, Berlin SO, Germany.

SANGUINOL is the name of two entirely different preparations. The St. Petersburg article is a dark-brown, odorless powder, soluble in water, obtained from calves' blood, and used as a hematinic in doses of 5 to 15 grains.—Mfr.: Dr. Weinschenker, St. Petersburg, Russia. The American sanguinol is a liquid petrolatum combined with sanguinarine and antiseptics, prepared according to a formula of the Brooklyn Throat Hospital, and used as a spray in diseases of the nose and larynx.—Mfrs.: Norwich Pharm. Co., Norwich, N. Y.

SANGUIVIM Tablets are said to consist of animal albumin and sugar and are credited with nutritive value.

SANNON BOUGIES are said to contain boric acid, zinc sulphate, manganese sulphate and alum, incorporated in a gelatin base.—Mfr.: Jankes Laboratory, Altona, Germany.

SANO is barley flour dextrinized by means of heat; a food containing in 100 parts, according to Aufrecht, 12 of proteids, 65 of starch, 4 of soluble carbohydrates, $1\frac{1}{2}$ of fat, and .14 of water.—Mfrs.: Sano Co., Berlin, Germany.

SANODERMA is a bismuth subnitrate bandage intended for use as an astringent dressing in burns, eczema, varicose ulcers, etc.—Mfrs.: Koch Bros., Münster, Germany.

SANOFORM (*diiodo-salicylic acid methyl ether*), $C_6H_2COOCH_3.OH.I_2$, results from the action of iodine upon wintergreen oil. It forms a white, odorless, and tasteless powder, soluble in ether, hot alcohol, and vaselin oil; and contains 62.7 per cent. of iodine. It was recommended a few years ago as a substitute for iodoform in surgery. It is also marketed as a paste, ointment, dusting powder, collodion, tablets, suppositories, ovules, bougies and gauze.—Mfrs.: Meister, Lucius & Brünig, Hoechst, Germany; agts.: V. Koechl & Co., New York.

SANOFORME is an emulsion of formaldehyde, used in diluted form as an antiseptic and disinfectant.—Mfrs.: Tardieu & Co., Paris, France.

SANOGEN is a disinfectant, essentially a saponification product of different tars, combined with calcium chloride, magnesium chloride and sodium chloride.

SANOSAL is an effervescent laxative salt, said to contain besides taste-correctants the ingredients of the Hungarian bitter waters.—Mfr.: Pelikan-Apotheke, Berlin W, Germany.

SANOSE is a food for the sick and convalescent, containing 80 per cent. of casein and 20 per cent. of albumose. It occurs as a white, odorless and tasteless powder, that readily forms an emulsion when stirred with

water. It seems to have been withdrawn from the American market.—Mfr.: E. Schering, Berlin, Germany.

SANOSIN, later called also *thieukalyptol*, was heralded in 1903 as a cure for consumption, Drs. Danelius and Sommerfeld being the introducers. It consists of the ethereal oil of eucalyptus maculata citriodorus, powdered leaves of the same plant, flowers of sulphur and powdered charcoal. The powder is heated on a plate in a special apparatus that goes with the remedy. It has not been referred to in medical literature during the past few years, and seems to have fallen into disuse.—Mfr.: R. Schneider, Berlin W, Germany.

SANOTHERM is a mixture for making oxygen baths, which in addition to the usual constituents contains a radioactive substance (pitchblende) and pine-needle extract.

SANOVAGIN is the name applied to vaginal ovules containing anesthesin, alumnol, zinc acetate, diiodosalicylic acid methyl ester, mercury oxycyanide and thymol, and which act as an antiseptic and astringent.—Mfrs.: Chem. Institute, Berlin W, Germany.

SANSOL is an antiseptic lubricating soap, designed especially for the lubrication of catheters, etc., and in gynecological and surgical examination.—Mfrs.: Norwich Pharmacal Co., Norwich, N. Y.

SANTAL MIDY is a French specialty consisting of soft capsules, each containing 5 minims of oil of sandalwood and used in gonorrhea.—Agts.: E. Fougere & Co., New York.

SANTAL ZADEK is a German article consisting of capsules containing 8 minims of oil of sandalwood.—Mfr.: Apotheker, Hugo Zadek, Breslau, Germany.

SANTALOL.—See *arhéol*.

SANTALOL CARBONATE is what a Swiss firm calls its counterpart of *carbosanto*.—Mfrs.: Greiner & Co., Glarus, Switzerland.

SANTALOL-FORMALDEHYDE is a condensation product of the two components, intended as a urinary disinfectant in urethritis and cystitis. See caution under *formaldehyde*.—Dr. A. Stephan, Gross Lichtenfelde, Germany.

SANTALSOL is advertised as "a water-soluble extract of sandalwood oil (?), copaiba balsam, cubeb oil, peru balsam, buchu, and pimenta oil; each fluid dram represents 4 minims of oil of sandalwood, 2 minims of oil of cubeb, 2 minims of copaiba, 1 minim of pimenta oil, and 20 minims of fluid extract of buchu." It is prescribed in gonorrhea, cystitis, etc. Dose, 1 to 2 fluid drams.

SANTHEOSE is a French trade name for *theobromine*. A "santhéose phosphatée" (sodium phosphate 1, theobromine 2) and a "santhéose lithinée" (lithium carbonate 1, theobromine 2) are also marketed.

SANTOL (Funck) consists of 90 per cent. of santalol and 10 per cent. of salol and is marketed in 4-minim capsules which are used in gonorrhea.—Mfr.: Ernst Funck, Radebeul, Germany.

SANTONINOXIM, $C_{16}H_{18}O_2(NO_2H)$, is a derivative of santonin obtained by the action of hydroxylamine hydrochloride upon it in presence of sodium hydroxide; a white powder, sparingly soluble in water, freely soluble in alcohol and ether. It is used as an anthelmintic, chiefly in children. Dose, $\frac{3}{4}$ to 2 grains, in 2 portions taken 1 to 2 hours apart; adult dose, 5 grains, in wafers or in water, and repeated for 2 or 3 days. It should be protected against light.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

SANTYL (*santalol salicylate*; *santaly salicylate*), $C_{22}H_{24}O_3$, occurs as a yellowish oil having a faint balsamic odor and taste, specific gravity about 1.07, soluble in about 10 parts of alcohol and insoluble in water. It is incompatible with alkalies and the usual incompatibles of the salicylates. It has been introduced as a substitute for sandalwood oil in acute gonorrhea, etc. Dose, 20 to 30 minims three or four times daily, with milk or in capsules; also marketed in 8-minim capsules.—Mfrs.: Knoll & Co., Ludwigshafen-on-Rh. and New York.

SANUS is a 36 per cent. solution of formaldehyde gas. See caution under *formaldehyde*.

SAOLA is "an odorless, non-toxic deodorizer and disinfectant" for general use, of undivulged composition.—Mfrs. Tilden Co., New Lebanon, N. Y.

SAPALCOL is an ointment-like alcohol soap made by Arthur Wolff, Jr., Breslau, Germany.

SAPARAFORM is a paraform (para-formaldehyde or trioxymethylene) soap, obtained by dissolving paraform to the extent of 3 to 5 per cent. in a liquid potash soap. It is a clear, yellow liquid, of faint formaldehyde odor, rapidly evolving formaldehyde gas when diluted. It is used for disinfecting the hands, skin, etc. See caution under *formaldehyde*.

SAPINES is a collective name for a group of medicaments (iodine, salicylic acid, ichthyol, formaldehyde, creosote and camphor, etc.), intended for use by inunction. See caution under *formaldehyde*.

SAPOCARBOL OO, O, and I are soap solutions containing crude cresol. Sapocarboll II is a mixture of resin soap with tar oil rich in cresols. They are used as general disinfectants and deodorants.—Mfr.: W. Reuss, Eisenbüttel, Germany.

SAPO CINEREUS is a potash soap made from lard and impregnated with mercury. It is intended as a readily penetrating substitute for mercurial ointment.—Mfrs.: P. Beiersdorf & Co., Hamburg, Germany; agts.: Lehn & Fink, New York.

SAPOCRESOL is claimed to be identical with *lysol* and hence analogous to the official *compound solution of cresol*.—Mfr.: Apotheke Schumacher, Greetsiel, Germany.

SAPOCRESOLIN is a thick, brownish-black liquid analogous to *creolin*.—Mfr.: Schumacher, as above.

SAPOCRESOTIN is said to be similar to *creolin*

SAPODERMIN is a superfatted soap containing mercury in the form of caseinate. It has a greenish-slate color and a faint and not unpleasant odor. It is used in parasitic and syphilitic skin diseases. Two strengths are furnished, $\frac{1}{2}$ and 1 per cent. of mercury respectively.—Mfrs. Chem. Institute, Berlin W, Germany; agts.: C. Bischoff & Co., New York.

SAPOFORM is a formaldehyde soap solution brought forward as a disinfectant. It occurs a sherry-colored liquid readily miscible with water or alcohol. It is used in 2 to 3 per cent. solution. See caution under *formaldehyde*.

SAPOGEN is the name by which the article now called *ioscorptol* was originally known. See *ioscorptol*.

SAPOKARBOLIN is saponified coal-tar creosote oils; a product analogous to if not identical with *creolin*—Mfrs.: Ferromannin Chem. Co., New York.

SAPOL is a solid soap spirit invented by Dr. R. Falck, of Breslau (Germany), intended especially for disinfecting the surgeon's hands, but also as a vehicle for medicaments used by inunction. It consists essentially of alcohol (70 per cent.), soda soap (15 per cent.) and water (15 per cent.). It does not melt in the hand.—Mfr.: Dr. Arthur Wolff, Breslau, Germany.

SAPOLAN (*naphtasapol*; *naphta saponata*) is a blackish-brown ointment consisting of lanolin, soap and a substance obtained by a fractional distillation of crude naphtha; a product analogous to and intended for the same purposes as *naftalan*.—Mfrs.: Jean Zibell & Co., Trieste, Austria.

SAPOLENTUM HYDRARGYRI is a superfatted potash soap containing $33\frac{1}{4}$ per cent. of mercury. It is soluble in water, and hence is considered better than gray ointment in the inunction treatment of syphilis. It is marketed in capsules, the contents of one of which constitute the ordinary application. Similar products are Unna's *sapo hydrargyri cinereus*, and Schuster's *sapo mercurialis*.—Mfr.: Apotheke Görner, Berlin W, Germany.

SAPO NATRII PEROXYDATI UNNA is used in acne and pustular rosacea as an emollient and decolorizing remedy. The base consists of 3 parts of liquid paraffin and 7 of white soap; and the amount of sodium peroxide added varies according to the case from 2 to 20 per cent.—Mfrs.: Schwanen-Apotheke, Hamburg, Germany.

SAPOPHENOL is an analogue of *lysol*, made by Wermund & Cie, Antwerp, Belgium.

SAPOPHTALUM (*sapo ophthalmicus neutrale*) is what P. v.d. Wielen calls a coconut oil soap base intended for medicinal purposes.

SAPOSILIC is a new soap for the mechanical disinfection of the hands and field of operation, and for use in acne. It is milder than marble dust soap, and does not scratch. The characteristic constituent appears to be silica.—Mfrs.: Chem. Werke "Hansa," Hemelingen, Germany.

SAPOZOL is a saponified cresol containing approximately 50 per cent. of cresol and thus probably identical with *liquor cresolis compositus* U. S. P. 1900. It is miscible with water, alcohol or glycerin, and is used in 1 to 3 per cent. solution as a surgical and gynecological disinfectant. Mfr.: Ferromannin Chem. Co., New York.

SAPOZON (Prof. Giessler) is an oxygen soap the active constituent of which is sodium peroxide, which latter is the source of the oxygen when the soap is brought into contact with water.—Mfr.: Paul Hartmann, Heidenheim, Germany.

SAPROL is a mixture of crude cresol and hydrocarbons of high boiling-point, intended as a general disinfectant.—Mfr.: F. Noerdlinger, Frankfort-on-M., Germany.

SAPROSOL is, according to H. Neutzel, a cresol-soap solution.

SARCOGEN PILLS contain the extracts of cinchona, wormwood, coca, and saw palmetto, and exsiccated blood and reduced iron. They are prescribed in chlorosis, anemia, etc. Dose, 2 after meals.

SARTOLIN is a patented consumption cure, the invention of a certain Dr. Robert Schneider, of Berlin. It is exploited direct to the laity. According to the patent specifications, it consists of powdered eucalyptus leaves 7.5 parts, oil eucalyptus 4.5 parts, flowers of sulphur 63 parts and powdered wood-charcoal 25 parts. A small amount of the mixture is directed to be placed upon a slab under which an alcohol lamp is burning, the patient confining himself all the night in a tightly closed room and inhaling the fumes that are given off.—Mfrs.: Sartolin Co., Chicago.

SARTON is a new food especially designed for the use of diabetic patients. It is said to be prepared from soja bean meal deprived by a special process of almost all the carbohydrates and the nonpalatable constituents. It is marketed in semisolid as well as pulverulent forms.—Mfrs. Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

SAUERIN is the name applied to tablets, the active constituent of which is a pure culture of the lactic acid bacillus. The article is intended for use in producing sour milk for use, according to the theory of Metschnikoff.—Mfrs.: Allen & Hanburys, London, Eng.

SAVONAL is an ointment soap, a solid olive oil and potash soap spirit, that mixes clearly with water, glycerin, and alcohol, and readily takes up ichthyol, sulphur, resorcin, tar, and other dermic remedies. A savonal combined with 20 per cent. of oleum rusci, one containing 20 per cent. of lianthral, and one combined with 5 per cent. of sulphur ("thiosavonal") are on the market.—Mfrs.: Jün-ger & Gebhardt, Berlin S, Germany.

SCABIOL is a reddish-brown, thin, odorless liquid, consisting essentially of storax (20 per cent.), soap and alcohol. As the name indicates it is employed in scabies.

SCARLATIN MARPMANN is an antitoxin serum used hypodermically and internally as a prophylactic of scarlatina.—Mfr.: Franz Schülke, Hamburg, Germany.

SCARLET RED is an aniline dye that has until recently been used only for microscopical purposes. It is also known as *Scarlet R*, *Biebreich scarlet*, and *fat ponceau R*. Latterly it has been used medicinally in 8 per cent. ointment on healthy ulcers and wounds free from edematous swelling. The pure, medicinal article occurs as a dark reddish-brown powder soluble in 15 parts of chloroform, readily soluble in oils, sparingly soluble in alcohol or ether, and insoluble in water.—Mfr.: E. Merck, Darmstadt; agts.: Merck & Co., New York.

SCAVALINE PILLS are bluish sugar-coated laxative pills containing phenolphthalein, extract of cascara sagrada, and compound extract of rhubarb, each 0.5 gram.—Mfrs.: Gablin & Co., Paris, France.

SCHEELIN PILLS (*salzschrifer gout pills*) are said to contain colchicum and sodium iodide.—Mfr.: Mrs. Wilh. Séiler, Coblenz, Germany.

SCHISTIOL is another of the numerous articles regarded as identical with *ichthyol*.—Mfr.: F. Guelpa, Paris, France.

SCILLIPICRIN is a bitter principle of squill; a yellowish to reddish-yellow, hygroscopic, granular mass, soluble in water and employed as a diuretic hypodermically. Dose, $\frac{1}{8}$ to 1 grain once daily.—(Nonproprietary.)

SCILLITIN is a bitter principle of squill, occurring as a blackish-brown mass or powder administered as a diuretic in doses of $\frac{1}{8}$ to $\frac{1}{2}$ grain.—(Nonproprietary.)

SCILLITOXIN (*scillain*) is a glucoside obtained from squill; a yellowish-brown powder, soluble in alcohol, and prescribed as a diuretic in doses of 1/60 to 1/20 grain several times daily, in pills. Maximum daily dose, $\frac{3}{4}$ grain.—(Nonproprietary.)

SCOPARIN, $C_{20}H_{30}O_{10}$, is a bitter principle derived from scoparius, a yellowish, odorless, tasteless powder, soluble in alcohol, hot water and dilute alkalies. It is used in dropsy. Dose, per os, 5 to 10 grains; hypodermically, $\frac{1}{2}$

to 1 grain, dissolved in water containing a trace of ammonia or in glycerin and water.—(Nonproprietary.)

SCOPOLAMINE, the alkaloid of *scopolia atropoides* and other varieties of *scopolia*, about which there formerly was considerable controversy regarding its relation to *hyoscine*, is now conceded to be identical chemically, physiologically and clinically, with *hyoscine*. The hydrobromide is official.

SCOPOMORPHINE is a solution of scopolamine hydrobromide and morphine sulphate prepared according to the formula of Dr. Korff and marketed in glass tubules of 1 c.c. It is employed as a general anesthetic subcutaneously. (See also *euscopol*.)—Mfrs.: J. D. Riedel Co., Berlin and New York.

SCOROGENE (Clin) is a granular, almost tasteless powder representing "a special extract of boldo containing the cholagogue constituent boldoglucin, but not the narcotic alkaloid boldine." It is used as a cholagogue and laxative. Dose, 2 to 6 teaspoonfuls per day; children half as much.—Marketed by E. Fougera & Co., New York.

SECACORNIN (*Ergotin-Roche; secornin*) is described as a sterile solution of the active principles of ergot in a menstruum consisting of distilled water, glycerin and alcohol (7.5 per cent.). 1 c.c. corresponds to 4 grams of ergot, and it is said to be standardized according to the method of Kehrer. It occurs as a dark-brown liquid. Its action and uses are the same as those of ergot. Dose, 8 to 15 minims. It may be given by intramuscular injection.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle (Switzerland) and New York.

SECORNIN is the name by which *secacornin* was first known.

SECRETIN is an acid extract of duodenal mucous membrane, suggested by Prof. B. Moore, of Liverpool, for use in diabetes and satisfactorily employed in that disease by Dr. J. H. Abram. It is given by the mouth, either as it is or after separation of the proteid. In sterilized bottles the preparation keeps for three or four days. The substance existing in the duodenum appears to be something of the type of a pre-enzyme. It is not an enzyme, else it would be destroyed by the high temperature at which secretin is prepared. This pre-enzyme is probably converted into an enzyme by the hydrochloric employed, this substance being absorbed and calling from the pancreas the pancreatic secretion upon which the beneficial effect in diabetes is said to depend. (See also *pulvis duodenalis*.)—Mfrs.: Biochemical Laboratory University of Liverpool.

SEDATIN or *sedatine* is a synonym of *antipyrin*; and of *valerydin*. See the latter title.

SEDATOLE is a cough sedative "containing in each fluid dram 1/24 grain or heroin, with tolu, sanguinaria,

squill, wild cherry, and balm of gilead buds."—Mfrs.: Sharpe & Dohme, Baltimore, Md.

SEDLOZON and OZONAL are trade-marked names for a mixture of sodium peroxide and sodium bicarbonate which added to water produces a so-called oxygen bath.

SEGARIN is a disinfectant pastille of unknown composition, used in place of creolin, etc.

SELENIN is an antitubercular serum prepared by Prof. E. Klebs from cultures of *diplococcus semilunaris*, a germ present in lymphatic glands, skin, and organs affected with tuberculosis. Selenin A is obtained by precipitation with alcohol, selenin B by precipitation with sodium-bismuth iodide, and selenin H by precipitation with hydrogen peroxide. They are used locally and internally. Dose, 1 c.c.—Mfr.: Fr. G. Klebs, Berlin W, Germany.

SELLAGEN TABLETS are keratinized and sugar-coated tablets said to contain 0.1 gram each of extract of *cassia sagra*, rhubarb, buckthorn and condurango. They are put forward as a laxative.—Mfr.: Alex. Müller, Bad Kreuznach, Germany.

SENNINE is a white, odorless powder, soluble in water, stated to be essentially a mixture of salicylic acid (2) and boric acid (3).—Mfrs.: Dios Chem. Co., St. Louis, Mo.

SENOFORME is a French designation for the article known in this market as *sanoform* (diiodosalicylic acid methyl ester) and employed as a wound antiseptic like iodoform.

SENVAL is an antidiabetic that does not, it is claimed, necessitate a rigid diet. It consists of (1) a compound fluid extract of senecio, valerian, wormseed and castoreum, (2) a powder containing alkaline salts and sponge charcoal. The action of the powder is disinfectant and antacid antizymotic.—Mfr.: Fritz Schubring, Berlin W, Germany.

SEPDELEN is a palatable syrupy fluid containing $\frac{1}{2}$ per cent. of ferrous iodide, and used in scrofula, chlorosis, rickets, etc. Dose, for adults, 1 to 2 tablespoonfuls after meals. *Sepdelen Salt* is a plant alkali salt, a so-called physiologic salt, recommended as a substitute for the treatment at Carlsbad and Neuenahr.—Mfr.: Alex. Müller, Bad Kreuznach, Germany.

SEPDELEN TABLETS, exploited for the treatment of kidney-stones, gout, etc., contain the sodium salts of tartaric, citric, phosphoric and sulphuric acids.—Mfr.: Dr. A. Müller, Bad Kreuznach, Germany.

SEPTICIDIN is a serum used in swine plague and chicken cholera. Septicidin A is chiefly for fowls; septicidin B for swine.—Mfrs.: Rothlaufserum Co., Berlin W, Germany.

SEPTOFORMA is a veterinary disinfectant, deodorant and antiparasitic, consisting, according to the makers, es-

sentially of "doxynaphthylmethane, $(C_{10}H_7O)_2CH_2$, dissolved in alcoholic linseed oil soap," perfumed with melissa and geranium oils. It occurs as a yellowish, transparent, oily liquid of alkaline reaction, and is soluble in water and alcohol, its solution foaming when shaken. Applied in 2 to 5 per cent. solutions. Marketed also as a 15 per cent. soap. See caution under *formaldehyde*.—Mfr.: Septoforma Co., Cologne, Germany.

SEQUARDINE is the name by which Brown-Séquard's testicular fluid is known in France. As is known, the article is used in impotence, cachexias, debility, etc. Dose, subcutaneously, 1 to 3 c.c.

SERAPHTHIN is a prophylactic remedy of undivulged composition for foot-and-mouth disease of cattle.—Mfrs.: Meister, Lucius & Brünig, Hoechst, Germany; agts.: V. Koechl & Co., New York.

SEROLITHOL is said to contain "all the principles of blood serum," and is used in arteriosclerosis, and other diseases increasing the coefficient of demineralization.—Mfr.: A. Milochau, Nantes, France.

SEROSANOL is a water-soluble silver and arsenic compound intended for use especially as an antisyphilitic.—Mfr.: Tauentzien-Apotheke, Berlin.

SERTHYMIN (Dr. Roth) is an extract of thyme containing 20 per cent. of sugar and employed in whooping-cough, laryngeal catarrh, etc. Dose, a teaspoonful three to six times daily, in sweetened water.—Mfrs.: Henn & Kittler, Strassburg, Germany.

SERUM, BICHLORIDE (Chéron), is a solution of mercuric chloride 1, sodium chloride 4, carbolic acid 4, and sterilized distilled water 400 parts. It is used subcutaneously in syphilis, 20 c.c. a week.

SERUM, BLONDEL'S, also known as *lactoserum*, is obtained by coagulating milk with acid, neutralizing the filtrate with soda and passing it through a porcelain filter, and impregnating with carbonic acid. It is used subcutaneously in diseases dependent upon arterial sclerosis. Dose, 10 c.c. twice daily.

SERUM, CUGUIILLERE'S, is composed of allyl sulphide, tincture of myrrh and Hayem's serum. It is used by injection in tuberculosis of the joints. Dose, $2\frac{1}{2}$ to 15 c.c.

SERUM LEUCOCYGENIC (Raymond Petit) is described as a horse serum subjected to a certain treatment to render it stable, introduced by the Pasteur Institute at Paris and marketed in liquid as well as in powder form. It is maintained that injections of the serum cause a great migration of leucocytes to the site of puncture, which bodies oppose the entrance of microbes by virtue of the phagocytosis they produce. This action is made use of in removing pus foci in markedly infected wounds and the like. According to Dellet, the serum in certain diseases brings

about a disappearance of the general symptoms of infection, reduces temperature, slows the pulse, heals up the wounds, and often wards off a fatal termination.—Mfrs.: Institute Pasteur, Paris and New York.

SERUM MARIN is advertised as a sterile, isotonic sea water and is intended for use in place of physiologic salt solution.—Mfrs.: G. & R. Fritz, Vienna, Austria.

SERUM, RHEUMATISM, is obtained from horses that have been rendered immune by injections of anaerobic rheumatism bacteria. It is used in the treatment of rheumatic endocarditis, cerebral rheumatism, chorea, etc.—Mfrs.: Bacteriologic Institute, Grenoble, France.

SERUMS or *antitoxins* are modern remedial agents based on the proposition that each toxin causative of a certain disease gives rise to a distinct antitoxin that is curative of the affection. Those most in vogue are the antidiphtheritic (described under antitoxin, diphtheria), antistreptococcic or streptolytic, antituberculous, antitetanic, antivenomous, and thyroid. Besides these, however, *anticarbuncle*, *anticholera*, *antidiabetic*, *antidysenteric*, *antifatigue*, *antipneumonic* and *antistaphylococcic* serums are made. *Antistreptococcic* or *streptolytic* serum is used in scarlet fever, erysipelas, puerperal fever, and other diseases caused by infection with streptococci; dose, 10 to 40 c.c. hypodermically. *Antituberculous* serum was first recommended by Prof. Maragliano; dose, 1 to 4 c.c. every other day to once weekly. *Antitetanic* serum is marketed in liquid and dry forms, the latter being several times as powerful as the former; the dose of the liquid as made by American manufacturers is 10 to 30 c.c. every 12 to 24 hours. *Antivenomous* serum, introduced by Calmette, has been described under the name *antivenin*. *Thyroid* serum was referred to here under *antithyroidin* (and *base-dowsan*). *Yersin's* serum is used in bubonic plague, in mild cases hypodermically, in severe cases also intravenously—150 to 300 c.c. together at the outset.

SERUMS, ARTIFICIAL BLOOD, are various mixtures of salts used subcutaneously in arterial sclerosis and affections dependent upon it (hemiplegia, paraplegia, etc.), as well as in collapse from profuse bleeding, etc. *Bardet's* serum consists of sodium chloride 1, sodium sulphate 2, sodium phosphate 3, carbolic acid $\frac{1}{2}$ and sterilized distilled water 96 $\frac{1}{2}$ parts. *Cantani's* serum consists of sodium chloride 2, sodium carbonate 1, and water 500 parts. *Chéron's serum No. 1* consists of sodium chloride 3, sodium sulphate 8, carbolic acid 1, and hot water 100 parts. *Chéron's serum No. 2* is the same as the former but without carbolic acid. *Crocq's* serum consists of sodium phosphate 1 and water 50 parts. *Dujardin-Beaumetz's* is made up of sodium carbonate 1, potassium sulphate 1, sodium lactate 1, sodium phosphate 0.5, sodium chloride 3.1, and water 1000 parts. *Gaube's antiarthritic* serum consists of

potassium chloride 154, calcium chloride 60, sodium chloride 22, magnesium chloride 15, calcium iodide 5, casein (dry) 80, and cherry-laurel water 200 parts. (Dose, 1 to 3 c.c. one to three times weekly). *Hayem's serum No. 1* consists of sodium chloride 1, sodium sulphate 2, and water 200 parts. *Hayem's serum No. 2* is composed of sodium chloride 0.75 and water 100 parts. *Herard's serum* consists of sodium chloride 5, sodium phosphate 12.5, sodium carbonate 45, potassium chloride 2.5, distilled water 10,000. *Huchard's serum* consists of sodium chloride 2, sodium phosphate 4, sodium sulphate 1, and water 40 parts. *Huchard's modified* or *No. 2 serum* is made up of sodium chloride 3, sodium phosphate 10, sodium sulphate 2.5, carbolic acid 1.5, and water 100 parts. *Kronecker and Lichtenstein's serum* is composed of sodium chloride 7.5, sodium carbonate 0.1, and water 1000 parts. *Latta's serum* consists of sodium chloride 3.5, sodium carbonate 1.7, and water 3400 parts. *Leclerc's serum* is made up of sodium chloride 4, sodium phosphate 0.5, sodium sulphate 0.5, and hot water 100 parts. *Locke's serum* consists of sodium chloride 6, calcium chloride 0.26, potassium chloride 0.4, calcium carbonate 0.03, distilled water 1000. *Luton's serum* consists of sodium chloride 4, sodium phosphate 4, sodium sulphate 10, and boiling water 100 parts. *Mathieu's serum* is composed of sodium chloride 1, sodium phosphate 4, sodium sulphate 6, and boiling water 100 parts. *Quinton's serum* is obtained by diluting sea water to a little below the specific gravity of the blood. *Renzi's serum* consists of iodine 1, potassium iodide 3, sodium chloride 6, and water 1000 parts. *Ringer's serum* is composed of sodium chloride 6, calcium chloride 0.1, potassium chloride 0.075, calcium carbonate 0.1, distilled water 1000. *Sapelier's serum* is composed of sodium chloride 6, sodium phosphate 0.45, sodium carbonate 3.1, potassium chloride 0.5, potassium sulphate 0.35, and boiling water 100 parts. *Schiess's serum* consists of sodium chloride 7.5, sodium carbonate 5, and water 100 parts. *Schwarz's serum* is made up of sodium chloride 6, and water 100 parts, with 2 drops of liquor sodæ to each 100 grams. *Sydmann's serum* is composed of sodium chloride 6, sodium carbonate 1, and water 1000 parts. *Trunczek's serum* consists of sodium phosphate 0.15, sodium carbonate 0.21, potassium sulphate 0.4, and water 95 parts.

SERVATOL SOAP is a neutral soap containing 1 per cent. of mercury oxycyanide and used for disinfecting surgeon's hands. *Servatol-marble soap* is a yellowish-white mass consisting of a neutral potash soap with 55 per cent. of coarsely powdered marble and 2 per cent. of mercury oxycyanide. It is used as a detergent, antiseptic soap.—Mfr.: C. Fr. Hausmann, St. Galen, Switzerland.

SESAMIN is a palatable emulsion of sesame oil intended for use in place of cod liver oil emulsion. Marketed also

in combinations with ferrous iodide, gualacol, oil of sandalwood, and camphor. Dose, $\frac{1}{2}$ to 2 tablespoonfuls.—Mfr.: L. Scheyer, Berlin, Germany.

SESAN is a rubefacient soap, apparently analogous to marble or pumice-stone soap.—Mfrs.: Sesan-Werke, Berlin, Germany.

SEVETOL (*emulsion sevim compound*) is a "permanent, palatable emulsion of mixed fats, with proteids and carbohydrates"—evidently patterned after Russell's emulsion of mixed fats. The combined fats, consisting of butter fat, beef fat, olive oil, lard and peanut oil, constitute one-third of the whole mixture, and are present in predigested form. It is intended as a nutrient in pulmonary tuberculosis, rickets, and other conditions of malnutrition. Dose, one dessertspoonful to two tablespoonfuls three times a day, in iced milk, or water, etc., increasing the dose every few days; children beginning with one to two teaspoonsfuls and increasing to the limit of tolerance.—Mfrs.: John Wyeth & Bro., Philadelphia, Pa.

SEXTONOL TABLETS consist of the six "tonols" (glycerinophosphates) of lime (2 grains), soda (2 grains), iron ($\frac{1}{2}$ grain), manganese ($\frac{1}{4}$ grain), quinine ($\frac{1}{4}$ grain), and strychnine (1/200 grain). These are employed as blood, nerve, and tissue nutrients.—Marketed by Schering & Glatz, New York.

SIC SERUM is an article introduced by Prof. Maragliano, of Genoa, made from the active constituents of the parenchyma and cortex of the suprarenal capsule of oxen. It is a light yellow, clear, quite stable liquid which keeps two years. It is put forward as a remedy especially in whooping-cough. It is said to act mainly upon the inflammatory processes caused by the disease, and seems to be more of an organo-therapeutic extract than a real serum.—Mfr.: Quinto, Genoa, Italy.

SICCO is a *dry hematogen*, an odorless, reddish-brown powder, derived from blood and employed as a "blood-maker," pure or as an elixir. Dose, 5 to 20 grains three times daily.—Mfrs.: "Sicco," Berlin C, Germany.

SICCOGEN (*hematogen duplex*) diluted with an equal quantity of water is said to yield a product identical with hematogen, a dark-red, clear, permanent preparation of pleasant taste.—Mfrs.: "Sicco," Berlin C, Germany.

SICCOGEN is also the name of a substance used for making carbonic acid baths.—Mfr.: Fred. Detsinyl, Budapest, Hungary.

SICCOLES ("dry oils") are dry triturations of non-palatable drugs, such as castor oil, extract of male fern, oil of sandalwood, creosote, etc., representing 50 per cent. of the oil.—Mfrs.: "Sicco," Berlin C, Germany.

SICCOSE is desiccated meat juice, made from beef.—Mfrs.: "Sicco," Berlin C, Germany.

SICCOSOTE SYRUP is said to consist of "potassium sulphocresotinate," fluidextract of gentian, simple syrup and water.—Mfrs.: "Sicco," Berlin C, Germany.

SIDERIN PILLS are a German make of *Blaud's pills*.—Mfr.: Concordia Medica, Erfurt, Germany.

SIDIODAL is a liquid preparation of Italian origin, introduced by Dr. A. Corrozzi as an alterative and hematinic. Each cubic centimeter contains 0.005 gram of iron and 0.02 gram each of iodine and guaiacol.

SIDONAL is *piperazin quinate* (chinate), $C_{18}H_{24}N_4O_{10}$, and occurs as a white powder of pleasant, slightly acidulous taste; freely soluble in water. It is prescribed in gout, renal calculi, and other manifestations of uric acid diathesis. Dose, 15 to 20 grains five or six times a day, with plenty of water.—Mfrs.: Vereinigte Chem. Werke, Charlottenburg, Germany; agts.: V. Koechl & Co., New York.

SIDONAL, NEW, is a cheaper variety of sidonal—chemically, *quinic anhydride* a white, odorless, tasteless powder, soluble in water, alcohol, ether or chloroform. Dose, 15 to 30 grains three to six times daily, with copious draughts of water.—Mfrs.: Vereinigte Chem. Werke, Charlottenburg, Germany; agts.: V. Koechl & Co., New York.

SILBEROL is a trade name for *silver sulphocarbolate*, which see.

SILIN (*hexamethylenetetramine citrosilicate*) is intended to be used in conjunction with alkalies in the uric acid diathesis (gout, gravel, etc.), and is hence marketed as "silin spring water," 1 liter of which contains silin 3 grams, sodium chloride 8 grams, sodium carbonate 2 grams, calcium carbonate 2 grams, magnesium sulphate 0.5 gram, and free carbonic acid 4.5 grams. Daily dose, one 750 c.c. bottle. See caution under *formaldehyde*.—Mfr.: "Pharmacia," Lippspringe, Germany.

SILVANA ESSENCE is an antiseptic used in a special disinfectant for the purification of dwellings. It consists of various essential oils of pines and their shoots.—Mfr.: Max Elb, Dresden, Germany.

SILVANOL is an arnica-benzoin glycerite used pure as a vulnerary, and in solution of 20 drops to a glass of water as a mouth wash.—Mfr.: Max Elb, Dresden, Germany.

SILVER ACETATE, $AgC_2H_3O_2$, occurs as white crystals, soluble in about 100 parts of water. It has been recommended by Dr. P. Zweifel as a succedaneum for silver nitrate especially as a prophylactic of ophthalmia neonatorum. It is used in 1 per cent. solution, which should be kept protected against light.—(Nonproprietary.)

SILVER-CASEIN.—See argonin.

SILVER CHINASEPTOLATE.—See argentol.

SILVER CITRATE (*Credé's antiseptic*, known abroad and formerly also on this market as *itrol*), $\text{Ag}_3\text{C}_6\text{H}_5\text{O}_7$, has come into vogue as a bactericide. It is claimed to be exceedingly powerful yet non-poisonous and non-irritating. It occurs as a white, odorless, heavy powder requiring 3800 parts of water for solution. It is applied pure or in 1 to 2 per cent. ointments on wounds, ulcers, etc., and in 1:4000 to 8000 aqueous solutions in gonorrhea, stomatitis, etc. Its solutions should be prepared in small quantities at a time (a pint or a quart), and kept in dark-amber bottles. See caution under *silver iodate*—(Nonproprietary.)

SILVER EOSOLATE is defined as the neutral salt of trisulpho-acetyl-creosote, containing 50 per cent. of silver and 20 per cent. of creosote, and soluble in water and glycerin. It is used as an astringent antiseptic, on wounds, in gonorrhea, etc., in 1 to 5 per cent. solutions, in ointments, or pure. To make solutions, rub up the salt with a little glycerin and water to a paste, then add the rest of the water and heat gently.—Mfr.: Joh. Lehmann, Berlin, Germany; agts.: Fischer Chem. Importing Co., New York.

SILVER FLUORIDE (known in Italy as *tachiol*), AgF , occurs as very deliquescent crystals rapidly changing on exposure to light and air to a yellow color and finally to a black crystalline mass. It is freely soluble in water, and said to be the most powerful antiseptic among the silver salts. Applied in 1:1000 to 1:5000 solutions chiefly; sometimes in 1 per cent. solutions. Its stains on linen may be removed by washing with weak solutions of potassium cyanide, or with a solution of corrosive sublimate 1, water 2000, salt 25.—(Nonproprietary.)

SILVER IODATE, Ag IO_3 , is a white powder almost insoluble in the usual solvents, and used chiefly in chronic diarrhea. Dose, $1/12$ to $1/6$ grain, as pills, several times daily. There is probably the same risk of permanent discoloration of the skin from internal use of this as from silver nitrate.—(Nonproprietary.)

SILVER LACTATE, formerly known also as *actol*, $\text{AgC}_6\text{H}_5\text{O}_5 + \text{H}_2\text{O}$, forms a white, odorless and nearly tasteless, crystalline powder, soluble in about 15 parts of water. It was introduced by Credé as an antiseptic for subcutaneous injection in certain infectious diseases (anthrax, erysipelas, etc.) and for disinfecting wounds, abscess-cavities, etc. Employed in 1:500 to 1:100 solutions. Dose, by injection, $3/4$ to 3 grains a day, singly or divided. The solutions should be prepared fresh with boiled, distilled water, and kept in black-glass bottles.—(Nonproprietary.)

SILVER NUCLEINATE is described under *nargol*.

SILVER PICRATE is described here under its trade name, *piceratol*.

SILVER-PROTALBIN is better known as *largin*, which see.

SILVER QUINASEPTOLATE.—See *argentol*.

SILVER SULPHOCARBOLATE (*silberol*; *silver phenol-sulphonate* or *sulphophenate*), $C_6H_4.OHSO_3Ag$, occurs as a white powder, soluble in water and alcohol. It is used as an antiseptic and astringent in ophthalmology and surgery, mostly in 1:500 to 1:100 solutions, which are sensitive to light.

SILVER THIOHYDROCARBUROSULPHONATE is a synonym of *ichthargan*.

SILVER TRINITROPHENOLATE.—See *picratol*

SILVER-VITELLIN is described under the title *argyrol*.

SINAPOL is an expressed oil of mustard advertised as a substitute for olive oil pharmaceutically in the preparation of chloroform oil, hyoscyamus oil, chamomile oil, etc. It does not thicken, it is claimed, nor does it become rancid; hence recommended also for use in making camphorated ammonia liniment, cosmetic creams, hair oils, etc.

SINAPOL is also a French neuralgia liniment consisting of rosemary spirit (78), castor oil (12), menthol (3), mustard spirit (3) and aconitine (0.04).

SIRAN is said to contain as its therapeutically active ingredients potassium sulphoguaiacolate and thyme extract, and to be carbonated and flavored with peppermint oil.—Mfrs.: Chem. Labor. "Nassovia," Wiesbaden, Germany.

SIRIS is an ethereal yeast extract intended as a substitute for meat extract, rich in nucleins but without the stimulating properties and the salts of meat extract.

SIROCOL (*liquor kali sulphoguaiacolicum comp.*) is a clear, syrupy liquid containing 7 per cent. of potassium guaiacolsulphonate (thiocol) and 7 per cent. of calcium salts. It is used in phthisis and chronic bronchitis. Dose, a teaspoonful to a tablespoonful three times daily.—Mfr.: A. Müller, Kreuznach, Germany.

SIROLIN is a 10 per cent. by volume (equal to 7 per cent. by weight) syrup of thiocol (potassium guaiacolsulphonate), prescribed chiefly for chronic bronchitis and pulmonary tuberculosis, in doses of a teaspoonful to a tablespoonful three times a day, after meals.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle (Switzerland) and New York.

SIRSOL (formerly *sirosol*) is a preparation similar to if not identical with *sirolin*, made by Reichold & Co., St. Ludwig, Germany.

SITOGEN appears to be an extract of yeast. It is intended to supplant extract of beef as an addition to soups, etc.—Mfrs.: Sitogen Extract Co., Löbau, Germany.

SIX-O-SIX ("606") is described under its chemical name *dioxydiaminoarsenobenzol*.

SKOPTEN is the name for a solution of scopolamine in oil.

SKUROL is another name for *isarol*.

SOAMIN is the trade name applied to *sodium aminophenylarsonate*, $C_6H_5(NH_2)AsO(OH)(ONa) + 5H_2O$. It contains 22.8 per cent. of arsenic and is soluble in about 5 parts of water, "yielding a neutral solution which can be sterilized by boiling for five minutes without undergoing decomposition. . . . It has less than 1/40 the toxicity of arsenous acid." It is employed as an antiluetic (generally by intramuscular injection) as well as an alterative (per os) in skin diseases. Dose, internal, $\frac{1}{4}$ to 1 grain after meals; intramuscular, 5 to 10 grains every second day.—Mfrs.: Burroughs, Wellcome & Co., London and New York. [Note: Experience has shown that great caution is necessary in the administration of the arylarsonates, such as soamin, orsudan, etc., as in certain cases toxic symptoms have arisen.]

SOCOTRIN is a veterinary preparation consisting essentially of ethereal tincture of valerian and tincture of aloes.

SODACOL is a proprietary term for *sodium guaiacolsulphonate*, which forms one of the ingredients of a mixture known as "triacol."—Mfrs.: Alpers Chem. Co., New York.

SODERAL is the name applied to bonbons consisting of sugar, malt extract and the ingredients of the mineral spring No. 12 at Soden on the Jaunus.

SODIFORMASAL is the sodium salt of formasal (methylenedisalicylic acid), hence *sodium methylenedisalicylate*, of the formula $C_{12}H_{10}O_5(CO.ONa)_2$. It occurs as an almost white powder, readily soluble in water, soluble also in alcohol, but insoluble in ether. It is used in migraine, neuralgia, rheumatism, chorea, etc. Dose, 5 to 20 grains. Incompatible with ferric salts. See caution under *formaldehyde*.—Mfr.: Organic Chem. Co., Philadelphia, Pa.

SODIUM ACETYL-SALICYLATE. See *hydropyrrine*.

SODIUM ACETYL-SULPHANILATE.—See *cosaprin*.

SODIUM AGARICINATE, $C_{12}H_{21}OH(COONa)_2$, occurs as a white, tasteless powder, freely soluble in water. Dr. H. Schneider has used it in phthisical night sweats. Dose, $1\frac{1}{2}$ to 3 grains, as powders, to be taken with water. Carbonic acid precipitates an acid agaricinate; mineral acids liberate agaricinic acid.—Mfr.: E. Merck, Darmstadt; agts.: Merck & Co., New York.

SODIUM AMINOPHENYLARSONATE. See *atoxyl* and *soamin*.

SODIUM ANHYDROMETHYLENOCITRATE is described under *citarin*.

SODIUM ANILINE-ARSONATE is a synonym of *sodium arsanilate*, a chemical better known by trade names *atoxyl* and *soamin*.

SODIUM ARSANILATE (*sodium aniline-arsonate*, *sodium aminophenyl-arsonate*) is better known by the trade names *atortyl* and *soamin*, which see.

SODIUM ARSENYLTARTRATE is a compound analogous in constitution to tartar emetic. It is obtained by saturating a boiling solution of sodium bitartrate with arsenous acid. It occurs as colorless crystals, the formula of which is $\text{NaAsO}_3\text{C}_4\text{H}_4\text{O}_6 + 2\text{H}_2\text{O}$. It is readily soluble in water. According to the formula, it contains about 24.5 per cent. of arsenic. The therapeutic investigation of the product is under way.

SODIUM BISULPHATE (*acid sodium sulphate*), $\text{NaHSO}_4 + \text{H}_2\text{O}$, is no new chemical, but has only recently been brought to the fore as a remedy in typhoid fever by Dr. H. G. McCormick, of Williamsport, Pa. It occurs as colorless crystals soluble in water. Dose, 15 grains in 4 ounces of water several times daily.—(Nonproprietary.)

SODIUM BRENZCATECHIN-MONO-ACETATE is the chemical designation for *guaiacetin*, which see.

SODIUM BROMOVALERIANATE is referred to under *valerobromine*.

SODIUM CACODYLATE or *dimethylarsenate*, $(\text{CH}_3)_2\text{AsO}_3\text{ONa} + 3\text{H}_2\text{O}$, occurs as an amorphous, white powder readily soluble in water. Used in place of the alkali salts of arsenic, because considered far less toxic than the arsenates. It has been particularly recommended in obstinate psoriasis, diabetes, tuberculosis, malarial cachexia, etc. Dose, by mouth, $\frac{1}{2}$ to 2 grains three times a day in pills or tablets; subcutaneously, daily $\frac{3}{4}$ to $1\frac{1}{2}$ grains. It imparts a garlicky odor to the breath and perspiration.—(Nonproprietary.)

SODIUM CINNAMATE (*sodium phenylacrylate*; *hetol*), $\text{C}_6\text{H}_5\text{CH}:\text{CH}.\text{CO}_2\text{Na}$, is a white crystalline powder soluble in about 20 parts of water. Used by intravenous injection in pulmonary tuberculosis. Dose, $\frac{1}{60}$ grain, gradually increased to $\frac{1}{3}$ grain, in 1 to 5 per cent. solution three times a week.—(Nonproprietary.)

SODIUM DIETHYLBARBITURATE, $\text{Na}(\text{C}_8\text{H}_{11}\text{O}_3\text{N}_2)$, is the mono-sodium salt of diethylbarbituric acid (diethylmalonyl-urea; "veronal"). It is marketed under various trade names, such as: *medinal*; *veronal-sodium*; etc. It occurs as a white, crystalline powder soluble in about 5 parts of cold water, the solution having a bitter-alkaline taste. The salt contains about 80 per cent. of the therapeutically active acid. It is a hypnotic, like veronal, but, owing to its ready solubility, it is claimed to act more promptly and to be eligible for use also hypodermically and by rectal injection. Dose, 5 to 15 grains in a glass of sweetened water or wine. For makers of various brands, see under *medinal* and *veronal-sodium*.

SODIUM DIODOSALICYLATE, $\text{C}_6\text{H}_3(\text{OH})_2.\text{COONa} + 2\frac{1}{2}\text{H}_2\text{O}$, occurs as colorless leaflets or needles soluble in 50

parts of water. It is used as an analgesic and antiseptic. Dose, 3 to 10 grains one to four times daily. Applied externally like iodoform, chiefly in parasitic skin diseases.—(Nonproprietary.)

SODIUM FLUORBENZOATE (*sodium para-fluorbenzoate*), $C_6H_4FICOONa$, occurs as a white powder soluble in water. It is recommended as an internal antiseptic and antizymotic, chiefly in lupus and other tuberculous processes. Dose, 8 grains three times daily.—Mfr.: E. Merck, Darmstadt, Germany.

SODIUM FORMATE, $NaCHO_2 + H_2O$, occurs as a white, water-soluble powder, and is employed externally in surgical tuberculosis ($\frac{1}{2}$ to 2 grains in solution once weekly), and internally in pneumonia (1 to 3 grains every 2 hours in infusion of *adonis vernalis*). See caution under *formaldehyde*.—(Nonproprietary.)

SODIUM GLYCERINOPHOSPHATE, $Na_2C_3H_7PO_3 + 7H_2O$, is marketed as 75 per cent. solution only, owing to its extreme deliquescence. It is put forward as an "assimilable nerve nutrient." Dose, by mouth, 3 to 10 grains, three times a day, as syrup or solution; hypodermically, 3 or 4 grains once daily. Its solutions and syrups do not keep well, and should hence be prepared in small quantities at a time. For hypodermic injections the water used should be boiled, distilled water.—(Nonproprietary.)

SODIUM GLYCOCHOLATE, $NaC_{25}H_{42}NO_6$, is a constituent of bile, occurring, in the pure state as a yellowish, very bitter powder soluble in water or alcohol. It has recently been recommended as an efficient cholagogue, particularly in hepatic colic and cholelithiasis in general. Dose, 5 to 15 grains three times daily, in capsules with a few grains of magnesia to prevent nausea.—(Nonproprietary.)

SODIUM IODATE, $NaIO_3$, is a white powder, soluble in water. It is used in the main as a substitute for potassium iodide internally, and for iodoform externally. Dose, 5 grains three times a day, in pills; subcutaneously (in muscular rheumatism), 1 to $1\frac{1}{2}$ grains. Applied externally in $1\frac{1}{2}$ to 10 per cent. solutions or ointments, or as a pencil (in corneal ulcers, trachoma, etc.).

SODIUM LYGOSINATE.—See *lygosine*.

SODIUM MERCURI-AMIDOOXY-ISOBUTYRO-SALICYLATE is an amorphous, light yellow hygroscopic powder, readily soluble in water, but insoluble in alcohol and ether. It contains 40 per cent. of mercury and is given in hypodermic doses of $1\frac{1}{2}$ to $2\frac{1}{4}$ grains as an antisiphilitic.

SODIUM META-VANADATE.—See *sodium vanadate*.

SODIUM METHYLACETYLAMINOPHENYLARSONATE. See *orsudan*.

SODIUM METHYL-ARSENATE.—See *disodium methyl-arsenate*.

SODIUM NUCLEINATE, the sodium salt of yeast nuclein, forms a white powder, almost completely soluble in water. It is used subcutaneously to stimulate nutrition the same as nuclein.—(Nonproprietary.)

SODIUM OLEATE, $\text{NaC}_{18}\text{H}_{33}\text{O}_2$, is a white powder, soluble in about 10 parts of water and 20 parts of alcohol. It is antacid and mildly laxative, and has been claimed to be particularly useful in diseases of the biliary tract. Dose, 4 to 15 grains, in pills.—(Nonproprietary.)

SODIUM OLEATE, ACID, represents about 70 per cent. of sodium oleate in an excess of oleic acid. It occurs as a yellow, soft, unctuous mass, and is employed as a cholagogue. Dose, 5 to 20 grains, in capsules.—Mfrs.: E. R. Squibb & Sons, New York.

SODIUM OSSALINATE is a sodium compound of the fatty acids in bone marrow. It is intended as a substitute for cod liver oil as an alterative and nutritive.—Mfr.: J. E. Stroschein, Berlin SO, Germany; agts.: Fischer Chem. Importing Co., New York.

SODIUM PARA-AMINO-PHENYL-ARSONATE is stated to be chemically identical with *atoxyl*.

SODIUM PARA-FLUORBENZOATE.—See *sodium fluorbenzoate*

SODIUM PARA-SULPHOBENZOATE.—See *sodium sulphobenzoate*.

SODIUM PERBORATE, $\text{NaBO}_3 + 4\text{H}_2\text{O}$, occurs as a white, odorless, granular salt, which in aqueous solution evolves hydrogen peroxide. It should contain not less than 9 per cent. of available oxygen. It has proved a good wound antiseptic. It is used as dusting-powder, or in freshly prepared solutions. It forms the basis of numerous oxygen-generating tooth-powders and tooth pastes, and has also been recommended for the convenient preparation of solutions of hydrogen peroxide.—Mfrs.: Roessler & Hasslacher Co., New York.

SODIUM PEROXIDE is the sodium salt of hydrogen peroxide containing at least 75 per cent. of Na_2O_2 . It occurs in the form of a white or yellowish, amorphous powder, soluble in water with evolution of oxygen and forming a solution of hydrogen peroxide. Medicinally it has been used in acne, in the form of a paste prepared with liquid paraffin, or as a soap to remove comedones. It has also been suggested as an air-purifier, based on the theory that the moisture of the air would liberate oxygen and the alkali simultaneously formed would absorb carbon dioxide.—(Nonproprietary.)

SODIUM PERSULPHATE, $\text{Na}_2\text{S}_2\text{O}_8$, is used chiefly in the solution known as *persodine*. See this.

SODIUM PHENONE-ACETATE is a chemical equivalent of *guaiaceticin*, which see.

SODIUM PHENYLPROPIONATE (*sodium hydrocinnamate*), $C_9H_7C.C.COONa$, differs from sodium cinnamate by having 2H less in its formula. It is put forward as a remedy, like the latter, in laryngeal and pulmonary tuberculosis. A hot $\frac{1}{2}$ to 3 per cent. aqueous solution is inhaled twice a day, half an hour each time. A 25 per cent. solution is marketed as *thermiol*.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

SODIUM PYROCATECHIN-MONO-ACETATE is *guaia-cetin*, which see.

SODIUM SILICOFLUORIDE or **FLUORSILICATE**, also known as *salufer*, $NaSiF_6$, occurs as a white, granular powder, slightly soluble in water. It is prescribed as an antiseptic and astringent, for wounds, cystitis, gonorrhea, aphthæ, etc., in 1.1000 solution mostly.—(Nonproprietary.)

SODIUM SOZOIODOLATE.—See under *soziodole*.

SODIUM SULPHANILATE (*sodium anilinosulphate*), $C_6H_5NH_2.SO_2Na + 2H_2O$, occurs as white glistening leaflets, soluble in water. It is employed in acute catarrhs and iodism; it is believed to convert the nitrites present in the nasal secretion and saliva into indifferent diazo substances. Dose, 15 grains, in water, six times daily.—(Nonproprietary.)

SODIUM SULPHOSALICYLATE, $NaC_7H_5O_2SO_3$, forms white crystals or powder, soluble in water and almost insoluble in alcohol or ether. It is used as an antirheumatic, antiseptic and antipyretic, like sodium salicylate, in rheumatism, neuralgia, chorea, pleurisy, etc. Dose, 10 to 30 grains.

SODIUM SULPHUROSO - BENZOATE Heckel (*sodium sulphite-benzoate*) is a white, crystalline powder, soluble in water, used as an external antiseptic in about $\frac{1}{2}$ per cent. solution.

SODIUM TELLURATE, $Na_2TeO_4 + 5H_2O$, occurs as a white powder soluble in water. It is prescribed chiefly to arrest phthisical night-sweats, but also in typhoid fever. Dose, $\frac{1}{4}$ to $\frac{3}{4}$ grain in elixir.—(Nonproprietary.)

SODIUM TETRABORATE NEUTRAL is the designation applied to a fused mixture of equal parts of borax and boric acid, occurring as transparent glass-like masses freely soluble in water, and recommended as a non-irritant, powerful antiseptic in diseases of the nose, ear, and eye. Applied in keratitis and conjunctivitis in substance finely powdered; in ear and nose affections, in saturated aqueous solution (about 16 per cent.)—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

SODIUM THYMOL-BENZOATE is the designation applied to an analogue of and substitute for *pyrenol*. According to Dr. Zernik, it is essentially a mixture of 1 part of benzoic acid and 2 parts of sodium salicylate, containing 0.1 per cent. of thymol. It is intended for use as an

antipyretic and anodyne in doses of 8 to 30 grains.—Mfrs.: Hoeckert & Michalowsky, Berlin SW, Germany.

SODIUM VANADATE (*sodium meta-vanadate*), NaVO_3 , occurs as a greenish-white, almost tasteless powder soluble in hot water. It is used as a nerve tonic and alterative in affections caused by sluggish metabolism, diabetes, phthisis, etc. Dose, 1/60 grain in water, before meals, for two or three days of the week.—(Nonproprietary.)

SODIUM AND CAFFEINE SULPHONATE. See *symphorol N*.

SODOPHTHALYL is a water-soluble derivative of phenolphthalein, *disodoquinone phenolphthaleinate*, and, like it, acts as a purgative. It is active also when injected subcutaneously, to which method of administration it is adapted.

SODOXYLIN is described as "a combination of sodium sulphate, prickly ash, colchicine, butternut and sodium bicarbonate, in effervescent granular form." It is exploited as an antacid, antilithic and antipodagric.—Mfrs.: Abbott Alkaloidal Co., Chicago, Ill.

SOLANINE, $\text{C}_{45}\text{H}_{75}\text{NO}_{15}$, is an alkaloid obtained from potato shoots and from *solanum dulcamara*. It is used as an analgesic, antineuralgic and nerve sedative, usually as the hydrochloride, which is water-soluble. Dose, ¼ to 1 grain.—(Nonproprietary.)

SOLEINE is "a natural, odorless petrolatum."—Mfr.: A. Lapeyre, Milan, Italy.

SOLITAENIA is a name for a tenifuge, said to be free from extract of male fern. It contains extract of pomogranate, castor oil and cocoa.

SOLITUSSIN is the name adopted for tablets of diatussin, each containing 1 drop of this preparation. See *diatussin*.

SOLPHINOL is a mixture of borax, boric acid, and sulphites, employed in France as an antiseptic.

SOL-SUL is a water-soluble sulphur compound used like ichthyol in skin diseases, catarrhs, chronic rheumatism, ulcers, etc. It occurs as a thick, yellow liquid, smelling of sulphuretted hydrogen. Dose, 3 to 10 grains. Applied mostly in 5 to 20 per cent. ointments, or 2 to 5 per cent. solutions.—Mfrs.: C. N. Crittenton Co., New York.

SOLUBLE FERRIC ARSENITE is a substance occurring as thin, faintly brownish-green scales easily soluble in water. According to analyses made in the laboratories of the American Medical Association, the article contains arsenic equivalent to 1.56 arsenous oxide and 15 per cent. metallic iron, together with ammonium citrate. It is used as a hematinic and alterative. Dose, 1/16 to ¼ grain.—Mfrs.: Sharp & Dohme, Baltimore, Md.

SOLUROL (*thyminic acid or nucleotinphosphoric acid*) is described as "a nuclein derivative possessing the prop-

erty of holding uric acid in solution and thus preventing its deposition in the tissues." The formula $C_{30}H_{46}N_4O_{15} \cdot 2PO_5$ has been assigned to it. It occurs as brownish-yellow, amorphous powder soluble in water. It is offered as a gout and gravel remedy. Dose, 4 to 8 grains three to six times daily, as tablets or elixir (so marketed).—Mfr.: Max Elb, Dresden, Germany; agts.: Schieffelin & Co., New York.

SOLUTIO CARBONATIS FERROSI is what G. A. Kal calls a solution intended as a substitute for Bland's pills. It is prepared from 25 grams of ferrous lactate, 28 grams of sodium carbonate, 22 grams of potassium tartrate, 1 gram of citric acid, 500 c.c. of cinnamon water, and sufficient distilled water to make 1000 c.c. The citric acid should be added only after the liquid has darkened. The salts dissolve slowly. The quantity of sodium carbonate named should not be exceeded; a large amount effects solution more quickly, but is not proper from a medical standpoint. After the liquid has become clear on the addition of the citric acid, it should be put up in bottles holding about 200 c.c. The last spoonful should still have a green color. The cinnamon water used should be prepared from best Ceylon cinnamon, and should distinctly smell of cinnamon, as should also the finished product; but the odor should not be referable to the use of cinnamon oil.

SOLUTION BLANCARD consists of exalgin 2.4 parts, diluted alcohol 20 parts, distilled water 60 parts and syrup 125 parts.

SOLUTION, RINGER'S.—See *Ringer's solution*.

SOLUTION OF SODIUM CHLOROBROMIDE (*Mitchell's fluid*), latterly recommended by Dr. H. W. Mitchell, of New York, for ulcerative processes including pulmonary tuberculosis, is prepared by adding to a suitable quantity of water, 3 per cent. of sodium chloride, 0.1 per cent. of bromine, and 0.5 per cent. of pure hydrochloric acid, and subjecting the mixture to the action of an electric current until chemical reaction has been completed. It is a pale-amber liquid, with a strong odor of chlorine, a slightly acid taste, and a specific gravity of 1.022. It should be kept in amber-colored bottles, in a cool place, and tightly corked. It is used pure on ulcers and other wounds; internally (in phthisis, etc.) in doses of 1 to 1½ fluid ounces four times daily, on an empty stomach.

SOLUTOL is a water-soluble disinfectant, consisting of an alkaline solution of cresols in cresol-alkali, and containing 60 per cent. of cresol. A *crude* and a *pure* solutol are marketed. The former has a tarry color, and is used for coarse disinfectant purposes. The pure solutol is used as a medicinal and household disinfectant.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

SOLVACID is the name given to compound pastilles of sodium citrate used in the uric acid diathesis.—Mfrs.: G. Hell & Co., Troppau, Austria.

SOLVENTERIC CAPSULES contain creosote, oil of sandalwood and copaiba, and solventeric pills contain potassium iodide, asafetida and sodium salicylate.—Mfrs.: Schieffelin & Co., New York.

SOLVEOL is a neutral solution of cresols with sodium cresotinate, containing about 25 per cent. of free cresol. It mixes clearly with water, and its tarry odor is not perceptible in dilutions. It is employed as a surgical disinfectant, like carbolic acid.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

SOLVIN is a saccharated extract of thyme analogous to pertussin and used like it in pertussis and allied affections. Mfrs.: Dr. H. Müller & Co., Berlin C, Germany. Another *Solvin* is a goiter remedy consisting of an aqueous liquid containing about 19 per cent. of glycerin, 10 per cent. of potassium iodide and 0.1 per cent. of free iodine.

SOLVOSAL-LITHIUM (*lithium salol ortho-phosphinate*), $C_6H_5.O.P.O.OLiOH.COOC_6H_5$, is a water soluble antipodagric and diuretic, used mainly in gouty conditions. Dose, 4 to 8 grains three or four times daily.—Mfrs.: Chem. Fabrik, Helfenberg, Germany; agts.: C. Reinschild Co., New York.

SOLVOSAL-POTASSIUM (*potassium-salol ortho-phosphinate*) is soluble in 20 parts of water, and is used as an antarthritic and diuretic in gouty manifestations. Dose, 4 to 8 grains several times daily.—Mfrs.: Chem. Fabrik, Helfenberg, Germany; agts.: C. Reinschild Co., New York.

SOLVOSICCA are concentrated, standardized, dry iron preparations intended for conveniently making the commonly prescribed ferruginous solutions. They are soluble in cold water and afford the desired solutions when used as follows: 120 grams of the particular solvosiccum are treated with 780 grams of cold water, the mixture shaken occasionally during an hour until solution is effected, and 98 grams of alcohol and 2 grams of any desired flavoring added.—Mfrs.: Chem. Fabrik Helfenberg, Helfenberg, Germany; agts.: Reinschild Chem. Co., New York.

SOLYKRIN PILLS consist of a mixture of 15 parts of solveol, 5 of lysol, and 2 parts of creolin, and are employed in puerperal fever. Dose, 1 to 3 pills.—Mfr.: Max Gotthill, Frankfort-on-M., Germany.

SOMAFERROL is an iron and manganese elixir containing also somatose. It is prescribed as a hematinic and nutrient, especially during convalescence after acute diseases. Dose, a dessertspoonful to a tablespoonful.—Mfr.: H. Peschken, Bremen, Germany.

SOMAGEN is a meat preparation consisting, according to the manufacturers, not only of stimulating meat salts and meat bases, but principally of the nutritive proteids

of meat in a soluble and readily assimilable form. It is nearly tasteless and odorless.—Mfr.: Dr. A. Wolff, Bielefeld, Germany.

SOMATOSE is the name applied to deutero- and hetero-albumoses derived from meat albumin by a special process. The article occurs as a light-yellow, granular, odorless, almost tasteless powder, soluble in water and all ordinary fluids. It is prescribed as a nutrient and reconstructive for the sick and infants. Dose, 150 to 240 grains per day; children up to 100 grains daily. The powder is poured into about half a glassful of hot water and let stand undisturbed until solution is effected. It is then added, if desired, to broth, soup, etc. It is best taken before meals.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

SOMATOSE *biscuits*, somatose *chocolate*, and somatose *cacao* all contain 10 per cent. of somatose.

SOMATOSE, IRON.—See *ferro-somatose*.

SOMATOSE, MILK, is described under *lacto-somatose*.

SOMATOSE, LIQUID, is marketed as sweet and spiced, the former having a mildly aromatic, sweet taste, the latter a spicy taste reminding of soup greens. Dose, a tablespoonful three times a day, before meals.

SOMDINE, or *Barnes' concentrated tincture of passiflora incarnata*, is used as a soporific, anodyne and nerve stimulant.

SOMNAL is an alcoholic solution of chloral-urethane; see the latter.—Mfr.: Apotheker Radlauer, Berlin, Germany.

SOMNIN is not a hypnotic, but an antiseptic consisting of boric acid and phenols.

SOMNOFORM is a local anesthetic used in dentistry. It is said to be a mixture of ethyl chloride (60), methyl chloride (35), and ethyl bromide (5).—Marketed by S. S. White Dental Mfg. Co., Philadelphia and New York.

SOMNOS is defined as an "elixir of trichlorethidene propenyl ether, or chloral glycerolate," each fluidounce of which contains 1.62 grams of "trichlorethidene propenyl ether," for which the chemical formula $C_6H_{11}O_2Cl$ is given, but which chemists appear to have considered as not rational. According to reports from the chemical laboratories of the American Medical Association, somnos contains approximately 5 per cent. of chloral glycerate and is analogous in physiologic action to a 5 per cent. elixir of chloral hydrate. The preparation is offered as a sedative and hypnotic. Dose, 1 to 2 tablespoonfuls.—Mfrs.: H. K. Mulford Co., Philadelphia, Pa.

SONATIN is defined as a solution of benzoyl benzoate in castor oil, and is exploited as a succedaneum for peruol in scabies.—Mfr.: Dr. A. Voswinkel, Berlin W, Germany.

SOPHOL is a compound of formaldehyde, nuclein and silver, "*silver-methylenenucleinate*." It occurs as a light, dark-yellowish, tasteless powder containing 20 per cent. of silver and readily soluble in water. It is offered as an astringent bactericide, similar in action to protargol, argyrol, etc. It is used in 2 per cent. to 5 per cent. solutions mainly. Its solutions should be made without heating and the water used should not have a temperature exceeding 95° F. They are best prepared by dusting the sophol upon the surface of the requisite quantity of water and allowing the liquid to stand undisturbed until the drug has dissolved; or the sophol may be rubbed up into a paste in a mortar with a little water and the rest of the water gradually added.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

SOPORVAL is a fluidextract of wild valerian root, containing but little alcohol and aged two years. It is recommended as a sedative in nervous insomnia, hysteria, etc.—Mfrs.: Hof-Apotheke, Dresden A, Germany.

SORBILIN is an analgesic, antipyretic, and anodyne of undivulged composition. Dose, 5 to 15 grains. Marketed also as 5-grain tablets.—Mfrs.: Yale Chem. Co., New York.

SORISIN is a 10 per cent. solution of sodium guaiacol-sulphonate in syrup of orange peel, used in pulmonary affections. Dose, 1 to 2 teaspoonfuls three times daily.

SORISIN FERRATED and **SORISIN ARSENATED** are sorisin containing a definite percentage of iron and arsenic respectively. They are brought forward as anti-tuberculars, anticatarrhals and alteratives.—Mfr.: Apotheker Scholz-Herabny, Vienna I, Austria.

SOSON is, according to the manufacturers, pure, dry muscle albumin. It occurs as a grayish-white, fine, odorless and almost tasteless powder, insoluble in water. It is used as a nutrient. Dose, a teaspoonful, with soups, etc.—Mfrs.: Eiweiss-und Fleischextrakt Co., Altona, Germany.

SOUFROSOL is vasogen containing 3 per cent. of sulphur. It is put forward as an antiparasitic dermic.

SOZAL is the trade name applied to *aluminium paraphenolsulphonate* or *sulphocarbolate*, $(C_6H_4.OH.SO_3)_2Al$. The drug occurs as brownish, crystalline granules, readily soluble in water, glycerin or alcohol. It is used in 1 per cent. solution on suppurating ulcers, in cystitis, local tuberculosis, etc.—Mfr.: C. Haaf, Berne, Switzerland.

SOZOBORAL is a mixture of aristol, soziodole salts and borates, used in coryza.

SOZOIODOLE is the generic name adopted for salts of diiodo-para-phenolsulphonic (soziodolic acid), $C_6H_4I_2.OH.SO_3H + 1\frac{1}{2}H_2O$. The latter occurs as white crystals, readily soluble in water, glycerin, and alcohol, and employed in 2 to 3 per cent. solution on wounds. Mercury

sozoiiodole occurs as a very fine, orange-yellow powder, soluble in sodium chloride solution, but insoluble in water or alcohol. It is employed in 10 per cent. ointment in parasitic and syphilitic skin diseases, and in 1 per cent. dusting powder in intertrigo, leg ulcers, etc. Dose, $\frac{1}{2}$ to $1\frac{1}{2}$ grains. *Potassium* sozoiiodole occurs as a white, odorless powder, which is soluble in 50 parts of water; it contains 52.8 per cent. of iodine. It is used externally in scabies, impetigo and other skin diseases, in gonorrhea, rhinitis, diphtheria, etc. Applied in 5 to 10 per cent. ointments or dusting powder, or in 25 to 50 per cent. insufflation powder. *Sodium* sozoiiodole occurs as colorless, odorless needles, soluble in 15 parts of water, 20 of glycerin and in alcohol. It is used internally as an antiseptic and antidiabetic, and externally in syphilitic lesions, gonorrhea, rhinitis, whooping cough, etc. Dose, 2 to 10 grains. Externally in 2 to 8 per cent. solutions, 10 to 25 per cent. powder or ointment, etc. *Zinc* sozoiiodole occurs as colorless, odorless needles, soluble in 25 parts of water, freely soluble in alcohol or glycerin. It is used largely in nasal catarrh (5 to 10 per cent. powder or 3 per cent. solution), in gonorrhea ($\frac{1}{2}$ to 1 per cent. solution), and in skin diseases (5 to 10 per cent. ointment). *Aluminium, ammonium, barium, lithium, magnesium* and *lead* sozoiiodoles are also marketed, but are not in vogue with the medical profession.—Mfr.: H. Trommsdorf, Aix-la-Chapelle, Germany; agts.: Mallinckrodt Chem. Works, St. Louis, Mo.

SPASMOSITE is a biscuit containing bromides instead of salt.—Mfrs.: Victoria-Apotheke, Stettin, Germany.

SPERMATHANATON Pastilles contain, according to Dr. Zernik's analysis, borax, sodium carbonate, tartaric acid and alum.—Mfr.: "Nassovia," Wiesbaden, Germany.

SPERMATOL is an elixir of coca, kola, condurango, celery and aromatics, made by Dr. Gordon, Hamburg, Germany.

SPERMINE Poehl is the hydrochloride of a base existing in the testicles and other glands of the animal economy, $C_8H_{17}N_2$. It is said to act upon the entire nervous system uniformly, as a tonic and stimulant, it is used in neurasthenia, locomotor ataxia, diabetes, phthisis, cachexias, etc. Marketed in 2 per cent. solution for subcutaneous use, dose 15 minims daily or every other day; and as *elixir* ("essence"), a 4 per cent. aromatized, alcoholic solution of the double salt spermine-sodium chloride; dose 10 to 30 drops in alkaline water in the morning.—Mfrs.: Prof. A. v. Poehl & Sons, St. Petersburg, Russia; agts.: Lehn & Fink, New York.

SPERMINE MARPMANN is described as a dilute alcoholic solution of the soluble substances of fresh bullocks' testicles, containing 2 per cent. of the base $C_8H_{17}N_2$, (spermine) together with albumins (absent in spermine Poehl). It is used in marasmus, convalescence from in-

fectious diseases, etc., like Poehl's spermine, but given by the mouth. Dose, 5 to 20 drops two or three times daily.—Mfrs.: Institute Marpmann, Leipsic, Germany.

SPERMINOL is a 2¼ per cent. alcoholic solution of spermine, intended for internal use; *sperminol subcutaneous* is a 2¼ per cent. solution in another menstruum than alcohol. The uses are the same as those of spermine described above. Dose by mouth, 15 to 30 minims; subcutaneously, half as much, once daily or every second day.—Mfrs.: Leopold Stolkind & Co., Berlin O, Germany.

SPHAGNOL is a distillation product of peat, consisting essentially of anthracene, benzene, phenol and cresols. It is used as a succedaneum for balsam of peru, tar and ichthyol in skin diseases. A *heavy* sphagnol, the oil with all its paraffins, and a *turbid* sphagnol, the oil deprived of its paraffins, are distinguished.

SPHYMOGENIN is a brand name for the active principle of the suprarenal capsule as marketed by Heyden Chem. Works, Radebeul (Germany) and New York. See *epinephrine*.

SPINOL is an organic iron compound derived from spinach, marketed in two forms; *syrupy*, dose 5 to 10 drops for children and ½ to 1 teaspoonful for adults; and *spinol dry*, an amorphous, brownish-green powder of pleasant odor and bitterish-salty taste, insoluble in the ordinary solvents, dose 2 to 8 grains three times daily.—Mfr.: J. E. Stroschein, Berlin SO, Germany; agts.: Fischer Chem. Importing Co., New York.

SPIRACIN is the name applied to *methyl-carbonylsalicylic acid*. The substance is insoluble in water and is intended as a substitute for salicylic acids and the salicylates. Dose, 10 to 20 grains.

SPIRAEIN is the name applied by Th. Knapp, of Basle (Switzerland), to tablets containing acetyl-salicylic acid (aspirin).

SPIROFORM is the name latterly adopted in the American market for the article known in Europe as *vesipyrin*. The substance is chemically acetyl-salol; salol (phenyl salicylate) in which one hydrogen atom has been replaced by an acetyl molecule, as shown in its structural formula: $C_6H_4.O.CH_2.CO.COOC_6H_5$, the formula for salol being $C_6H_4.OH.COOC_6H_5$. It occurs as a white, crystalline powder, of a very faint aromatic odor, and practically tasteless. It is insoluble in water, but readily soluble in alcohol. Like salol, it passes the stomach almost wholly unaltered, but is decomposed in the intestines into acetic acid, phenol and salicylic acid. Spiroform, as its original name, vesipyrin, indicates, was introduced as a vesical antiseptic, but has latterly been recommended also in rheumatism, influenza, sciatica and other neuralgias. Dose, 7½ to 15 grains, three to five times daily, in cachets or tablets.

Spiroform is marketed also as 7½-grain tablets.—Agts.: Ernst Bischoff & Co., New York.

SPIROSAL is a trade name for *monoglycol salicylate* or *monoglycolic ester of salicylic acid*, $C_{10}H_{10}O_4$. The product occurs as a nearly colorless and almost odorless oily liquid, freely soluble in alcohol, ether or chloroform, and soluble in about 110 parts of water and 8 parts of olive oil. It is readily miscible with an equal part of petrolatum or fat. It is offered as an external application in rheumatic affections as well as in excessive or offensive perspiration. It is applied undiluted or mixed with 2 to 3 parts of alcohol, or in a mixture with 8 parts of olive oil or in 50 per cent. ointment.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

SPLEEN DRIED has been used empirically in anemia, chlorosis, myxedema and various other diseases with no definite results.

SPLENIFERRIN is obtained from the spleen of cattle, and is brought forward as an organic iron compound for use wherever iron is indicated. It occurs as a brown powder, but is marketed only as pills.—Mfr.: Dr. M. Claasz, Tirschtiegel, Germany.

SPLENIN is an English splenic extract, like spleniferrin.

SPLENON.—See under *tannin-organotherapeutic preparations*.

SPURMAX is an undescribed ingredient of a formula for a face lotion published in the lay press. According to analyses made in the chemical laboratory of the American Medical Association, it consists essentially of crystallized magnesium sulphate, with traces of perfume and coloring matter.—Mfrs.: H. S. Peterson & Co., Chicago, Ill.

SPUTAN is a liquid preparation made from tar and said to contain those constituents of tar that are useful in tuberculosis. Dose, a tablespoonful.—Mfrs.: Hy. Laaser's Fabrik, Berlin SW, Germany.

STAGNIN is a preparation obtained by Hirsch by autolysis of horses' spleen. Originally a yellowish-brown, water-soluble powder, it is marketed only in solution, containing a little chloroform as preservative. It has been recommended by Dr. Theo. Landau as a hemostatic in gynecological practice, by intramuscular and subcutaneous injection. Dose, 1 to 3 c.c. daily.—Mfrs.: Drs. Freund & Redlich, Berlin, Germany.

STAGOPHOR, a prophylactic against gonorrhea, consists of a 20 per cent. solution of protargol and 10 pastilles of mercury oxycyanide 15 grains each to each package.—Mfrs.: Apotheke zur Austria, Vienna IX, Austria.

STAPHISAGRINE, $C_{22}H_{33}NO_6$, is an alkaloid of *delphinium staphisagria*. It occurs as an amorphous, bitter powder, soluble in alcohol and very sparingly in water. It is less

toxic than delphinine, and is without action on the heart. It is used as an antidote to strophanthin. Dose, 1/30 to 1/15 grain.—(Nonproprietary.)

STAPHYLASE is supposed to be the active constituent of beer yeast. It is used in staphylococcus infection.—Mfr.: "Doyen," Paris, France.

STARCH ANIMAL. See *glycogen*.

STARCH, IODIZED (*iodamyl*), is a bluish-black powder, soluble in alcohol, and containing 2 per cent. of iodine. It is used internally in diarrhea, typhoid fever, etc., and externally in ointment form as a substitute for iodine tincture. Dose, 3 to 10 grains.—(Nonproprietary.)

STATIN is the name for gelatin capsules containing the ingredients for making the following prescription: Solution of subacetate of lead 25 grams, alum 5 grams, water enough to make 500 grams.

STEAGINE consists, according to Crinon, of zinc stearate and paraffin, and is employed in dermatological practice.

STENOL is a granular effervescent salt each teaspoonful of which represents $1\frac{1}{2}$ grains each of caffeine and theobromine. It is used as a diuretic and heart stimulant.—Mfrs.: Viktoria-Apotheke, Berlin, Germany.

STENOSINE is a trade name for *disodium methyl-arsenate*, which see. It is marketed only in $\frac{1}{6}$ grain capsules.—Mfrs.: "Vial," Paris; agts.: E. Fougere & Co., New York.

STERESOL BERLIOZ is a solution of 270 parts of shellac, 10 of benzoin, 10 of balsam of tolu, 100 of carbolic acid, 6 of cinnamon oil, 6 of saccharin in alcohol to make 1000 parts. It is used as a paint in diphtheria, in tuberculous ulcers of the skin, etc.

STERIFORM CHLORIDE consists of 5 per cent. of formaldehyde, 10 per cent. of ammonium chloride, 20 per cent. of pepsin, and 65 per cent. of milk sugar. It is used internally in infectious diseases chiefly. Dose, 5 to 15 grains. See caution under *formaldehyde*.

STERIFORM IODIDE consists of the same ingredients as the preceding, save that it contains ammonium iodide instead of ammonium chloride. Dose, 5 to 15 grains. See caution under *formaldehyde*.

STERILETTE ADRENALIN and **STERILETTE SUPRARENALIN** are two sterilized preparations of the active principle indicated, designed for use in special apparatus devised by the manufacturers.—Mfrs.: Squire & Sons, London, Eng.

STERILIGEN PASTILLES are said to contain tetraboric acid, sodium bicarbonate, and talcum. They are intended as an antiseptic.—Mfrs.: Eisenbach & Co., Frankfurt-on-M., Germany.

STERISOL OPPERMANN is a general disinfectant "containing the salts of milk besides menthol and 0.3 per cent. of formaldehyde." See caution under *formaldehyde*.

STERISOL ROSENBERG is a solution of milk sugar saturated with formaldehyde of undivulged concentration. It is employed internally in tuberculosis and diphtheria chiefly. Dose, $\frac{1}{4}$ to 1 grain. See caution under *formaldehyde*.

STILI RESINOSI UNNA are pencils consisting of rosin and 10 per cent. of yellow wax. They are used as a depilatory, heated and pressed upon the hirsute surface.

STILI SPIRITUOSI UNNA consist of so-called solidified alcohol and soda soap, put up in collapsible tubes or as pencils. To prepare them, 6 parts of sodium stearate are dissolved in a mixture of 2 parts of glycerin and 100 parts of alcohol and the mixture poured into forms and allowed to cool. They are used as a protective skin varnish.

STILLINGOL is a remedy for the treatment of gallstones. It consists of two different preparations, (1) an ointment said to contain oil of lavender and oil of citronella, and (2) a fluid, for internal use, said to contain glycerin, rhubarb, cascara sagrada and the extracts of various indifferent drugs.—Mfr.: Dr. O. Kaplick, Berlin, Germany.

STOMACIN is a mixture of sodium bicarbonate, bismuth salicylate, powdered rhubarb and aromatic powder. It is used as a stomachic, carminative and antizymotic. Dose, 15 to 30 grains.

STOMAGEN is exploited as a digestive and stomachic. According to the analysis of Dr. F. Zernik, it consists substantially of papain, pepsin, bismuth subnitrate, milk sugar, and small proportions of citric acid, condurango bark, ginger, angostura bark and peppermint oil.—Mfr.: A. Lincke, Steglitz-Berlin, Germany.

STOMAN is defined as "a chemical combination of formaldehyde with the maltose of malt extract; *pentamethanal maltosate*." It is used as a disinfectant chiefly in diseases of the nose and throat. Marketed as 15-grain tablets, each of which contains about $\frac{1}{7}$ grain of absolute formaldehyde (see caution under formaldehyde).—Mfrs.: Chem-phar. Labor. "Sahir," Munich, Germany.

STOMATOL is a wound antiseptic said to consist of 2 parts of soap, 45 of alcohol, 2 of aromatic substances (oil of peppermint, etc.), 5 of glycerin, and 42 of water.—Mfrs.: Stomatol Co., Hamburg, Germany.

STOMOSAN is *methylamine phosphate* intended as a remedy for gall-stone disease.—Mfrs.: G. & R. Fritiz, Vienna, Austria.

STOVAINE is the trade name adopted for *benzoyl ethyldimethylaminopropanol hydrochloride*, $C_{14}H_{21}O_2N.HCl$. It is closely related chemically to alypin. It occurs in small,

shining scales which are freely soluble in water or alcohol. Its solutions may be sterilized by boiling without suffering decomposition, but are incompatible with alkalies and all alkaloidal reagents. Stovaine is used as a local anesthetic, and is claimed to be only about one-half as toxic as cocaine. It is used mostly in 1 to 4 per cent. solutions; to mucous membranes it is applied in 5 to 10 per cent. solutions. Dose internally, 1/30 grain, in pills or tablets.—Mfrs.: Poulenc Frères Co., Paris; agts.: Parmele Pharmacal Co., New York.

STRAMMENTHOL is a name for cigarettes used for the treatment of asthma. They contain stramonium leaves, sodium nitrate and menthol.

STREPTOCOL is a liquid antiseptic said to contain cresols; whether any other ingredient is present we are unable to state. It is used for general disinfecting purposes in 2 to 3 per cent. solutions. The preparation has not the strong, unpleasant smell of cresol; its odor seems to have been modified by some addition.—Mfrs.: Steinfalker Co., New York.

STRONFORMASAL is defined as *strontium methylenedisalicylate*, and reputed to have a tonic value in anemic rheumatic cases. Dose, 20 to 30 grains three or four times daily. See caution under *formaldehyde*.—Mfrs.: Organic Chem. Co., Philadelphia, Pa.

STRONTIUM ACETATE occurs as a white powder soluble in water. It has come into use as an anthelmintic. Dose, 45 grains in water sweetened with glycerin, morning and evening for five days.—(Nonproprietary.)

STRONTIUM ARSENATE, $\text{Sr}(\text{AsO}_2)_2 + 4\text{H}_2\text{O}$, forms a white powder soluble in water. It is employed as an alterative, chiefly in malaria and skin diseases. Dose, 1/30 to 1/15 grain.—(Nonproprietary.)

STRONTIUM FERRATE occurs as a dark-red powder, slightly soluble in water, but decomposing rapidly with the evolution of oxygen and the formation of iron and strontium bromides. It is used as a hematinic and nerve. Dose, 5 to 15 grains.

STRONTIUM LACTATE, $\text{Sr}(\text{C}_2\text{H}_3\text{O}_2)_2 + 3\text{H}_2\text{O}$, occurs as a white, granular powder of slightly bitter taste. It is soluble in about 4 parts of water, less freely in alcohol. It is employed as an alterative, antiscorbutic and anthelmintic, in rheumatism, nephritis, worms, etc. Dose, 5 to 15 grains; as an anthelmintic, 30 grains twice daily for five days.—(Nonproprietary.)

STRONTIUM SALICYLATE, $\text{Sr}(\text{C}_7\text{H}_5\text{O}_2)_2 + 2\text{H}_2\text{O}$, occurs as white crystals, soluble in water and alcohol. It is prescribed as an antirheumatic and anodyne in doses of 10 to 15 grains two or three times daily.—(Nonproprietary.)

STRONTIUM AND CAFFEINE SULPHONATE.—See *symphorol S*.

STROPHANTHIN is the amorphous glucoside of *strophanthus Kombé*, now official. It is prescribed as a heart tonic and sustenent. Dose, 1/120 to 1/60 grain three times daily. Antidotes are atropine or muscarine subcutaneously, camphor, or picrotoxin.

STROPHANTHIN THOMS (*gratus strophanthin*; *g. strophanthin*; *crystalline strophanthin*) is a crystalline glucoside obtained from *strophanthus gratus* and having the formula $C_{30}H_{40}O_{12} + 9H_2O$. It is identical chemically with *ouabain*. The official strophanthin is methylouabain, $C_{21}H_{40}O_{12}$, and is obtained from *strophanthus kombe*. It occurs as colorless, odorless, bitter crystals, soluble in about 100 parts of water and 30 parts of absolute alcohol, slightly soluble in ether or chloroform. Its action is qualitatively identical with that of official strophanthin, but is twice as active when injected hypodermically or intravenously. Dose, 5 to 10 minims of a 1 per cent. solution; by injection, 1/120 grain.—Mfrs.: E. Merck, Darmstadt; agts.: Merck & Co., New York.

STROPHANTHONE is described as "a purified and physiologically tested preparation of *strophanthus* seed." It may be used hypodermically or internally. Dose, 8 to 15 minims.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

STRYCHNINE ARSENATE occurs as a white powder soluble in water. It is used chiefly in tuberculous skin diseases and malaria. Dose, 1/60 to 1/15 grain; subcutaneously, 4 to 16 minims of 1/2 per cent. suspension in liquid paraffin.—(Nonproprietary.)

STRYCHNINE CACODYLATE, recommended as an appetizer and alterative in phthisis, occurs as a white powder soluble in water. It is a very unstable salt, which quickly decomposes in solution, the strychnine depositing. Such a liquid would of course be extremely dangerous, as the patient might get a fatal quantity of strychnine in a dose from the last portion of it; the drug should not be dispensed in solution. Dose, 1/30 to 1/4 grain, three times daily.—(Nonproprietary.)

STRYCHNINE GLYCERINOPHOSPHATE occurs as a white, crystalline powder soluble in water. It is used as a reconstructive nervine. Dose, 1/60 to 1/20 grain.—(Nonproprietary.)

STRYCHNINE IODATE, $C_{21}H_{22}N_2O_2 \cdot HIO_3$, occurs as colorless needles, soluble in water. It is employed mostly subcutaneously in certain paralyses, anesthetics, etc. Dose, 1/20 to 1/10 grain.—(Nonproprietary.)

STRYCHNINE NITRATE (official) is used largely in dipsomania, hypodermically. Dose, 1/60 to 1/20 grain.

STURMANN'S SOLUTION for local anesthesia consists of cocaine hydrochloride 1 gram, decolorized tincture of iodine 0.3 gram, phenol 0.3 gram, glycerin 10 grams, and distilled water to make 100 grams. To 1 gram of this

solution, 2 drops of solution of suprarenine hydrochloride (or of any hydrochloride of the active principle of the suprarenal capsule) 1:1000 are added.—(Nonproprietary.)

STYPTICIN, $C_{12}H_{13}NO_4 \cdot HCl$, is *cotarnine hydrochloride*, the base of which is an alkaloid obtained from narcotine by oxidation. It occurs as a yellow, crystalline powder, of bitter taste, and readily soluble in water and alcohol. It is used as a uterine hemostatic and sedative, and as a styptic in dental and nasal hemorrhage. Dose, in violent bleeding, $1\frac{1}{2}$ to 4 grains, several times a day; in menorrhagia, $\frac{3}{4}$ to $1\frac{1}{2}$ grains four or five times daily, in tablets or elixir. Externally it is applied in substance or in strong solution, or as gauze or cotton. Marketed also as $\frac{3}{4}$ grain sugar coated tablets, as dental tablets, and as gauze.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

STYPTOGAN is a styptic paste consisting of 30 parts of potassium permanganate, 10 parts of silica and 60 parts of petrolatum.—Mfrs.: J. D. Riedel Co., Berlin and New York.

STYPTOL is neutral *cotarnine phthalate*, and thus related to stypticin. It occurs as a yellow, bitter powder, freely soluble in water. It is used like stypticin, and in the same doses. Marketed also as $\frac{3}{4}$ -grain sugar coated tablets.—Mfrs.: Knoll & Co., Ludwigshafen and New York.

STYRACOL is the *cinnamic ester of guaiacol* or *guaiacol cinnamate*, $C_{18}H_{14}O_3$, occurring as a white, odorless crystalline powder, easily soluble in alcohol or chloroform, and insoluble in water. It contains 55 per cent. of guaiacol. It is used in place of guaiacol in phthisis and intestinal tuberculosis and catarrh. Dose, 15 grains three or four times daily, as powders or tablets; for children from 4 to 8 grains per dose.—Mfrs.: Knoll & Co., Ludwigshafen and New York.

STYROSAPON is a neutral potash soap containing 25 per cent. of styrolin, the active ester of storax, and credited with antiseptic and antiparasitic properties.

SUBCAIN is described as a solution containing cocaine hydrochloride, salicylic acid, suprarenine borate, sodium chloride and a little eucalyptol. It is put forward as a local anesthetic, particularly in minor operations such as extraction of teeth.—Mfrs.: Dr. F. Escherich & Co., Vienna, Austria.

SUBCUTIN is the name applied to *anesthesin para-phenolsulphonate* which occurs as a white powder soluble in 100 parts of water. Its solutions are not decomposed by boiling, and it is used subcutaneously in 1 per cent. solution in physiological salt solution as a local anesthetic in place of anesthesin.—Mfr.: Dr. E. Ritsert, Frankfurt-on-M., Germany; agts.: C. Bischoff & Co., New York.

SUBESTON is a *dibasic*, pulverulent, sparingly soluble, *aluminum acetate* of the formula, $Al_2(C_2H_3O_2)_2(OH)_4$. It is employed as an astringent and antiseptic dusting powder.—Mfr.: Dr. Alb. Friedländer, Berlin, Germany.

SUBLAMINE is the trade name for *ethylenediamine mercury sulphate* $[HgSO_4 \cdot 2C_2H_4(NH_2)_2 + 2H_2O]$. The substance occurs as a white powder readily soluble in water. It is recommended for disinfection of the hands in surgical and gynecological practice, and as a substitute for corrosive sublimate hypodermically in syphilis, in eye diseases and other cases wherein mercuric chloride is used. It is said to be less irritating than the latter, and not to cause stomatitis or diarrhea. Dose, 15 minims of 1 to 3 per cent. solution subcutaneously. It is also applied externally in 1:5000 to 1:500 solution. For hand disinfection a 1:1000 solution is used. It is also employed as a fixative for anatomical, pathological and histological purposes (5 to 10 per cent. solutions).—Mfr.: E. Schering, Berlin; agts.: Schering & Glatz, New York.

SUBSTITOL is a dry fibrin which, according to Bergel, is prepared in the following way: The fibrin is isolated from the unclotted blood of healthy animals, chiefly horses, by a special process under the most strictly aseptic conditions, without the use of chemical substances, after the red blood corpuscles and the serum (afernol) have been separated. It is then dried at a temperature so low as not to destroy the active ferments present, powdered and tested for its sterility. It can be sterilized and is recommended as a dusting powder or as an emulsion for injections in wounds.—Mfr.: E. Merck, Darmstadt, Germany.

SUCCINIC ACID ESTER OF SALICYLIC ACID.—See *diaspirin*.

SUCCINOL is defined as a purified amber-oil tar obtained by the dry distillation of amber. It is used chiefly as an antipruritic in pruritus, psoriasis and eczema.—Mfrs.: Hirsch-Apotheke, Frankfurt-on-M., Germany.

SUCCINYL DIOXIDE or **PEROXIDE**.—See *alphozone*

SUCCUS CITRI FERRATUS SACCHARATUS is a syrup of citric acid containing 3 per cent. of iron citrate and employed as a palatable hematinic in chlorosis and anemia.—Dr. E. Fleischer & Co., Rossau, Germany.

SUCCUS CITRI NATRONATUS contains, besides double the quantity of potassium salts contained in regular lemon juice, also 5 per cent. of sodium citrate, but no sugar. It is used in chronic rheumatism, gout, gravel, etc.—Mfrs.: Dr. E. Fleischer & Co., Rossau, Germany.

SUCRAMIN is the ammonium salt of saccharin, or *ammonium ortho-sulphamine benzoate* or *ammonium benzoic sulphinide*. It occurs as a white, freely soluble powder of intensely sweet taste, and is intended as a substitute for soluble saccharin (sodium-benzol-sulphonic imide) as a sweetener.

SUDOFORMAL is soft formaldehyde soap, used in sweating feet, dandruff, etc. See caution under *formaldehyde*.

SUDOL is a local remedy for excessive perspiration, consisting of 3 per cent. of formaldehyde in a mixture of wool fat and glycerin, and perfumed with oil of wintergreen. See caution under *formaldehyde*.—Mfr.: Edw. Schneider, Wiesbaden, Germany.

SUDORAL is another remedy used in excessive sweating of the feet. It contains boric, benzoic, and tartaric acids, and alum, in solution.—Mfrs.: Salamon's Apotheke, Dresden, Germany.

SUGEROL is a brand of *benzosulphinide* (saccharin).

SULFAMMON is a counterpart of *ichthyol* made by a competing firm.—Mfr.: Apotheker Grischow, Altendorf, Germany.

SULFIDAL is the trade name adopted by a Viennese firm for its *colloidal sulphur*. See this.—Mfrs.: G. & R. Fritz, Vienna, Austria.

SULFINID is a German brand of *benzosulphinide* (saccharin).

SULFOGENOL is a Swiss analogue of *ichthyol*, extolled as a complete substitute for the latter, and physically identical with it.—Mfrs.: Lüdy & Cie, Burgdorf, Switzerland.

SULFOGUAIAICIN (*quinine sulphoguaiacolate* or *guaiacol-sulphonate*) occurs as small, yellow, bitter scales, soluble in water and alcohol. It is prescribed in phthisis, intestinal catarrh, scrofula, etc. Dose, 5 to 15 grains three times daily.

SULFOID. See *sulphur colloidal*.

SULFOLAN. See *thiolan*.

SULFONAL (*sulfonmethane*; *diethylsulphon-dimethylmethane*) is now official under the name *sulphon-methane*.

SULFOPYRIN is a succedaneum for *migrainin*, defined as a chemical compound of antipyrin and sulphanilic acid, but consisting, according to Dr. F. Zermik, practically of a mixture of about 86.5 parts of antipyrin and 13.5 parts of sulphanilic acid. Dose, 5 to 15 grains.—Mfrs.: Ebert & Meincke, Bremen, Germany.

SULFOSOTE is the potassium salt of the diphenols and diphenolic esters contained in creosote. It is a brown, syrupy fluid, freely soluble in water, and extremely hygroscopic, in view of which it is marketed only as a 10 per cent. syrup that lacks the odor of creosote and is palatable. It is cheaper than *sirolin*, and is used, like the latter, in consumption, chronic bronchial catarrh, etc., in the dose of 1 to 4 fluid drams.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle (Switzerland) and New York.

SULFURARIA is a yellow powder consisting essentially of sulphur and potassium salts, which is deposited by the sulphur springs of San Filippo. It is employed in various skin diseases, either as a powder, or in paste or ointment.

SULFUROL is claimed to be the *ammonium sulphoichthyolate* of the Swiss Pharmacopoeia, and would hence appear to be identical with *ichthyol*, which see.—Mfrs.: Basler Chem. Werke, Basle, Switzerland.

SULLACETIN is defined as the potassium-sodium salt of pyrocatechinmonoacetic and guaiacolsulphonic acids. It is a white, odorless, slightly bitter salt marketed in powder form as well as in tablets. According to Dr. F. Zernik, it is essentially a mixture of molecular quantities of potassium guaiacolsulphonate and guaiacetin. It is offered as a remedy in tuberculosis and other affections of the respiratory tract. Dose, 5 to 15 grains.—Mfrs.: Drs. van Gember & Fehlhaber, Berlin-Weissensee, Germany.

SULPHOGEN is advertised as an antiferment, antacid, and stomachic, and said to contain "in each fluid dram 1 grain of sulphur, 3 grains of magnesia, and the active principle of genista, with aromatics." It is used in acid dyspepsia, flatulence, and the like. Dose, a teaspoonful three to six times daily, after eating.—Mfrs.: Sulphogen Chem. Co., St. Louis, Mo.

SULPHOLINE LOTION is said to be a mixture of water, glycerin, alcohol, zinc oxide, and sulphur with traces of a red coloring matter and perfumed with oil of rose.

SULPHOLYTHIN is defined by the makers as "*sulphophosphite of sodium and lithium*." Chemical analysis made under the auspices of the American Medical Association, indicates its composition to be: "Sodium sulphate anhydrous 10.51 per cent., anhydrous sodium phosphate 56.67 per cent.; anhydrous sodium thiosulphate 20.78 per cent.; sodium chloride 5.98 per cent.; lithium, as citrate, 3.12 per cent.; free sulphur 0.16 per cent.; moisture 1.53 per cent.; loss 1.25 per cent." It is a granular, noneffervescent alkaline salt, sparingly soluble in cold water, but readily soluble in hot water. It is used as a hepatic stimulant and eliminant, in chronic constipation, auto-intoxication, rheumatic and gouty conditions, etc. Dose, a teaspoonful in hot water at bedtime or before breakfast.—Mfrs.: Laine Chem. Co., New York.

SULPHONMETHANE and SULPHONETHYLMETHANE are the U. S. P. designations for *sulfonal* and *trional* respectively.

SULPHOPHENOL-SILVER.—See *silberol*.

SULPHUR COLLOIDAL (*sulfoid*) occurs as a grayish-white powder containing 80 per cent. of sulphur and about 20 per cent. of albumin. It is soluble in water, forming

a milk-like liquid. Its solutions on standing any length of time deposit sulphur and should hence be prepared fresh as wanted. The substance is insoluble in alcohol. Acids, alkali and ammonium salts precipitate sulfoid from its solutions, but the precipitate redissolves on the addition of water. Sulfoid mixes well with ointment bases. It is offered as a dermic, in place of sulphur.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

SULPHUR LYE is prepared by a patented process "consisting in melting together flowers of sulphur and sugar, dissolving the resulting crystalline mass in water and boiling with soda ash." It is employed for making sulphur baths for use in the treatment of skin diseases; $\frac{1}{4}$ liter suffices for a bath. The article is also offered in combination with a superfatted soap for use in acne, pityriasis, etc.

SUPPOSITORIES ADRENO-STYPTIC are said to contain 0.00025 gram of adrenalin and 0.2 gram of anesthestovaine. They are employed in the treatment of hemorrhoids.—Mfrs.: Laboratoire "Midy," Paris, France; agts.: E. Fougere & Co., New York.

SUPRACAPSULIN is another trade name for the active principle of the suprarenal capsule in 1:1000 solution. See *epinephrine*.—Mfrs.: Cudahy Packing Co., Chicago, Ill.

SUPRADIN is an iodized dried extract of the suprarenal gland. Dose, 2 to 5 grains.—Mfrs.: Hoffmann-LaRoche Chem. Works, Basle (Switzerland) and New York.

SUPRANEPHRANE HYDROCHLORIDE is a brand name for 1:1000 solution of the active principle of the suprarenal capsule. See *epinephrine*.

SUPRARENADEN is a dried extract of suprarenal gland, 1 part representing 2 of fresh capsule. It is used in diabetes, Basedow's disease, etc. Dose, $7\frac{1}{2}$ grains two or three times daily.—Mfrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

SUPRARENAL GLAND DRIED officially represents five times its weight of fresh suprarenal capsule. It is prescribed as an alterative and nervine, in Addison's disease, diabetes insipidus, climacteric disturbances, etc. Dose, 3 to 6 grains, after meals. The active principle of the suprarenal gland is known by various trade names and is described herein under *epinephrine*.

SUPRARENALIN is the name used for *epinephrine* by Armour & Co., Chicago, Ill. For description, see the latter title.

SUPRARENAL-TOGEN is a solution of 1 gram of suprarenal extract, 5 grams of chloretone and 7 grams of sodium chloride in 1000 grams of distilled water.—Mfr.: Gideon Richter, Budapest, Hungary.

SUPRARENINE is a brand name for *epinephrine*.—Mfrs.: Meister, Lucius & Brünig, Hoechst, Germany; agts.: V. Koechl & Co., New York.

SUPRARENINE BORATE occurs as white crystals readily soluble in water; 1.3 parts equal 1 part of suprarenine. Action the same as epinephrine. It is used as a hemostatic in tooth extraction. Marketed as tablets, each containing 1/500 grain of suprarenine borate, 1/6 grain of cocaine hydrochloride, and approximately 1/6 grain of sodium chloride, used in solution of 1 tablet in 1 c.c. of sterile water.

SUPTOL is a bacterial product first prepared by Dr. Burow and employed by him in the treatment of acute and chronic swine plague. 5 c.c. are injected per dose behind the ear.—Mfr.: E. Merck, Darmstadt, Germany.

SYCOSE is a trade name for the article commonly known as *saccharin* and now official under the name of *benzosulphinide*.

SYMPHOROL is the collective name for several salts of caffeine-sulphonic acid. *Symphorol N* (sodium symphorol; nasrol), $C_8H_9N_4O_2 \cdot SO_3Na$, occurs as a white, crystalline, bitter powder, soluble in about 20 parts of water and employed as a diuretic in doses of 15 grains four or five times a day in capsules. *Symphorol L* (lithium symphorol) is more readily soluble in water and is used particularly in gout and gravel; *symphorol S* (strontium symphorol) is freely soluble in water and is prescribed more especially in renal diseases, etc.—Mfr.: E. Merck, Darmstadt, Germany.

SYNTHOL is described as a chemically pure synthetic substitute for absolute alcohol.

SYPHILIS DIAGNOSTIC (Von Dungern) is furnished in a case with sufficient reagents for five tests, a bottle containing 1 c.c. of organic extract in alcoholic solution, a bottle containing 1 gram of dried amboceptor (goat's serum standardized against human blood), 20 strips of complement paper (a paper impregnated with the serum of guinea-pigs) and a sodium chloride tablet.—Marketed by Merck & Co., New York.

SYRGOL is defined as "a combination of colloidal silver (oxidized) and albumoses, containing 20 per cent. of silver." It occurs as brownish-black odorless scales, soluble in about 2 parts of water, and readily soluble also in glycerin. It is used as an astringent and bactericide, mostly in 0.1 to 0.3 per cent. solution.—Mfr.: B. Siegfried, Zofingen, Germany.

SYROLAT is a new substitute for *sirolin* (syrup of thio-col). It is prescribed as an antitubercular and anticatarrhal.—Mfrs.: "Sicco," Berlin W, Germany.

SYRUPI SICCI occur in the form of dry granular powders, which are easily soluble in water.

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TABLETS, ANTIEPILEPTIC, contain per hundred 1 gram of validol, 24 grams of compound effervescent powder, bromide, and 15 grams of ammonium bromide.—Mfrs.: Dr. H. Müller & Co., Berlin C, Germany.

TABLETS OF EXTRACT FUCUS VESICULOSUS (reducing tablets) are chocolate-coated tablets containing 1 grain of extract of bladder wrack, $1\frac{1}{2}$ grains of dried bitterless extract of cascara sagrada, $1\frac{1}{2}$ grains of extract of frangula, and milk sugar to make $7\frac{1}{2}$ grains. Dose, 1 tablet two or three times daily.—Mfrs.: Dr. H. Müller & Co., Berlin C, Germany.

TABLOGESTIN is chologestin in tablet form. Three tablets contain the active medicinal ingredients of one tablespoonful of chologestin. They are used as an intestinal digestive, cholagogue, and solvent of biliary calculi. Dose, 3 tablets, with a copious draught of water after each meal.—Mfr.: F. H. Strong Co., New York.

TABULETTÆ ARTHRITICÆ SIMON are said to contain 0.001 gram of colchicine, with quinic acid and citric acid.

TACHIOL or *tachyol* is an Italian trade name for *silver fluoride*, which see.

TACHYSAN is a colorless liquid, of strong menthol-like odor, described as a distillation product of equal parts of the wood of the camphor tree and the whole moxa and peppermint plants. It probably contains camphor dissolved in wormseed and peppermint oils, and is used as an embrocation in headache, rheumatism, lumbago, etc.—Mfr.: Paul Hentschel, Zwönitz, Germany.

TÆNIOL is a vermicide the constituents of which are said to be sabirol (the active principle of a species of embelia), dithymol salicylate and turpentine oil. It is marketed in gelatin capsules.—Mfrs.: Krewel & Co., Cologne, Germany; agts.: Lehn & Fink, New York.

TAKA-DIASTASE (*Koji*), obtained by J. Takamine by the action of *aspergillus oryzae* (Cohn) upon steamed rice, occurs as a brownish, hygroscopic, nearly tasteless powder, soluble in water but insoluble in alcohol. It is used in amylaceous dyspepsia, 1 part digesting 100 parts of dry starch. Dose, 2 to 5 grains, after meals.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

TALLIANINE is an aqueous solution of an ozonized terpene, said to liberate on contact with the blood 6 volumes of ozone per unit volume. It is used by intravenous injection in pulmonary tuberculosis, pneumonia, infectious endocarditis, septicemia, etc. Dose, 5 c.c. once daily or every second day. Marketed in 5 c.c. tubes; also as veterinary tallianine, in 10 c.c. tubes.—Marketed by W. F. Sykes, New York.

TANARGAN (*tanargentan*) is a tannin-silver-albumin preparation containing 10 per cent. of silver and 15 per cent. of tannic acid. It is sparingly soluble in water and acid liquids, soluble with decomposition in alkali solutions. It is used as an intestinal astringent and disinfectant. Dose, 5 to 10 grains. *Tanargan infants'* is a similar product but contains only $1\frac{1}{2}$ per cent. of silver and 25 per cent. of tannin.—Mfrs.: Drs. R. & O. Weil, Frankfort-on-M., Germany.

TANFORMAL is a compound of tannic acid, phenol and formaldehyde, occurring as a brown powder of slight aromatic odor and taste. It is insoluble in water, and decomposed by alkalis into its components. It is employed as an intestinal astringent and disinfectant. Dose, 10 to 30 grains. See caution under *formaldehyde*.—Mfrs.: Wm. R. Warner & Co., Philadelphia, Pa.

TANNAL is a trade name applied to basic *aluminium tannate*, a light-brown powder insoluble in water and employed in nose and laryngeal affections by insufflation as an astringent antiseptic. *Soluble tannal* is *aluminium tannotartrate*, a yellowish-brown powder soluble in water, employed as a gargle or douche in throat and nose troubles, in 1 to 5 per cent. solution.—Mfrs.: J. D. Riedel Co., Berlin and New York.

TANNALBIN (*tannin albuminate exsiccated*) occurs as a brown, odorless, tasteless powder, containing 50 per cent. of tannic acid. It is practically insoluble in the ordinary solvents, but soluble with decomposition in alkali solutions. It is employed as an intestinal astringent, in diarrheas of various forms. Dose, 15 to 30 grains, as powder or loosely compressed tablets.—Mfrs.: Knoll & Co., Ludwigshafen-on-Rh. and New York.

TANNALBORIN is defined as a compound of aluminium subgallate with sodium polyborate, and is used as an intestinal astringent in veterinary practice. Calves receive a teaspoonful, cattle a tablespoonful, dogs 15 to 45 grains, two or three times daily.—Mfr.: M. Claaaz, Rathenow, Germany.

TANNICHTHOL suppositories contain phenol $\frac{3}{4}$ grain, tannic acid $2\frac{1}{2}$ grains, ichthyol 1 grain, extract belladonna $\frac{1}{4}$ grain, extract stramonium $\frac{1}{4}$ grain, and extract witch-hazel $\frac{1}{4}$ grain, with or without opium (1 grain). They are used in hemorrhoids and anal fistula.—Mfr.: H. K. Mulford Co., Philadelphia, Pa.

TANNIGEN (*diacetyl-tannin* or *tannyl acetate*), $C_{14}H_{18}(C_2H_3O)_6$, occurs as a light-gray, nearly odorless and tasteless, somewhat hygroscopic powder, soluble in alcohol, solution of sodium phosphate, borax, or soda, but insoluble in water. Decomposed by alkalis. It is used as an intestinal astringent in non-infectious diarrhea. Dose, 5 to 15 grains three to six times daily, as powders.—Mfrs.:

Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

TANNIN ALEURONAT.—See under *aleuronat*.

TANNIN - ORGANOTHERAPEUTIC PREPARATIONS are products of the various organs, that have been rendered resistant to the gastric juice, analogously to pancreon. The active constituents, which have been designated as organic enzymes, hence pass the stomach unacted upon and manifest their full action and become absorbed in the intestines. Thus far the following compounds have been prepared: *Heparon*, made from ox livers, with the simultaneous action of pancreas whereby the power of the liver to decompose glucose is considerably increased; *Musculon*, obtained from the muscles of cattle under simultaneous treatment with pancreas, and possessing the property of increasing the glucose-destroying function of the liver; *Organo-glycolytica*, the combined dried substance of the preceding two products; the "tanno" form of which is shortly to be marketed as an antidiabetic under the name of *Trion-Ovaron*, made from ovaries with the aid of tannin; *Teston*, from bulls' testicles; *Tyron* from the thyroid glands of pigs; and *Spleron*, from the spleen of swine. The "tanno" preparations are intended for the same purposes as the simple organotherapeutic products. They are marketed as powder, and as tablets each containing 0.1 gram of active substance.—Mfrs.: Chem. Fabrik "Rhenania," Aix-la-Chapelle, Germany; agts.: (probable): Merck & Co., New York.

TANNIN-THYMYL-METHANE.—See *tannothymal*.

TANNIPYRINE (*antipyrin tannate*) is a condensation product of tannic acid and antipyrin employed as a styptic in nosebleed, etc.

TANNISMUTH is the trade name for *bismuth ditannate*. It occurs as a light-yellow powder with slightly astringent taste, insoluble in water. It contains from 17 to 21 per cent. of bismuth. It is employed as an intestinal astringent. Dose, 5 to 15 grains three to five times daily. Marketed also as 7½ tablets, 20 in a tube.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

TANNISOL (*methylene-ditannin*) is described as a condensation product of tannin and formaldehyde, analogous to *tannoform*.—Mfrs.: H. Wolfrum & Cie, Augsburg, Germany.

TANNOBROMINE is obtained by the action of formaldehyde upon dibromtannin. It occurs as a reddish or yellowish-gray powder, containing 25 per cent. of bromine, soluble in alcohol, slightly soluble in water, readily soluble in alkaline liquids. It is employed as a nerve sedative in place of the alkali bromides, and, externally, as an antipruritic. Dose, 15 to 60 grains three times daily. See caution under formaldehyde.—Mfrs.: Akt. Ges. für

Anilinfabrikation, Berlin, Germany; agts.: Lehn & Fink, New York.

TANNOCASUM results from the action of tannic acid and formaldehyde upon casein in alkaline solution. It occurs as a gray powder, insoluble in the ordinary solvents, and used as an intestinal astringent like tannalbin, etc. Dose, 10 to 30 grains. See caution under *formaldehyde*.

TANNOCHROM is a combination of chromium bitannate and resorcin, marketed as an ash-gray insoluble powder containing 50 per cent. of the substance, and as a 50 per cent. solution readily miscible with water, alcohol, glycerin, etc. The powder is used in ointments in ulcers, eczema, etc.; the liquid in $\frac{1}{4}$ to $\frac{1}{2}$ per cent. solutions in gonorrhea.—Mfrs.: G. Hell & Co., Troppau, Austria.

TANNOCREOSOFORM is an odorless, tasteless compound of tannic acid and creosote with formaldehyde; used as an intestinal antiseptic and astringent, particularly in tuberculous enteritis. Dose, 8 to 20 grains. See caution under *formaldehyde*.

TANNOFORM (*tannin-formaldehyde*, *methylene-ditannin*) is a condensation product of tannic acid and formaldehyde, occurring as a whitish-red, odorless powder, soluble in alcohol, and in alkalies, but insoluble in water. It is employed as a drying antiseptic and deodorant in sweating feet, weeping eczema, etc., and as an intestinal astringent and disinfectant; also as a dandruff cure. Used externally pure or in 10 to 25 per cent. dusting powder. Dose, 4 to 15 grains; for cattle, 5 to 10 drams. See caution under *formaldehyde*.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

TANNOGUAIAFORM is an odorless, tasteless compound of tannic acid, guaiacol and formaldehyde, employed as an intestinal astringent and disinfectant, especially in intestinal tuberculosis. Dose, 8 to 20 grains. See caution under *formaldehyde*.

TANNON is a name by which *tannopine* was known some time ago.

TANNOPINE is chemically *hexamethylenetetramine-tannin*, $C_{14}H_{24}O_{22}N_4$, and is a condensation product of tannin with hexamethylenamine. It forms a fawn-colored, odorless, tasteless powder, insoluble in the ordinary solvents, but soluble with decomposition in alkaline liquids. It is prescribed as an intestinal astringent and disinfectant, in diarrheas of various kinds. Dose, 10 to 15 grains four to six times daily, as powders or tablets. Marketed also as *veterinary tannopine*. See caution under *formaldehyde*.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

TANNOSAL is described under the name most commonly employed: *creosal*.

TANNOSPLENOFERRIN is a product obtained by macerating for several hours dried and powdered ox

spleen with water and treating the filtrate with tannic acid. It occurs as a granular, reddish-brown powder.

TANNOTHYMAL (*tannin-thymyl-methane*) is described as a condensation product of formaldehyde, thymol and tannin, and occurs as a whitish, tasteless powder melting at 235° C. and soluble in alcohol and in alkali solutions. Dr. Baumgarten has used it as an antidiarrheal. See caution under formaldehyde.—Mfrs.: Schimmel & Co., Miltitz, Germany; agts.: Fritsche Bros., New York.

TANNYL is defined as a compound of tannin and oxy-chlorcasein. It occurs as a grayish-brown, almost tasteless powder, insoluble in water, and recommended by Dr. E. Ueber as an intestinal astringent. Dose, 15 to 30 grains.—Mfrs.: Gehe & Co., Dresden, Germany.

TANOCOL (*colla tannica*) is a compound of tannin and gelatin, occurring as a grayish-white, odorless powder, containing about 50 per cent. of tannic acid, nearly insoluble in water, but soluble with decomposition in alkaline liquids. It is prescribed as an intestinal astringent. Dose, 15 to 30 grains, in barley gruel or the like.—Mfrs.: Akt. Ges. für Anilinfabrikation, Berlin, Germany; agts.: Lehn & Fink, New York.

TANPHENYFORM is a new name for *tanformal*, a mixture said to be composed of tannin albuminate 63.9 parts, hexamethylenamine 8.3 parts and phenyl salicylate (salol) 27.8 parts. The product is used as an intestinal astringent and antizymotic. Dose, 10 to 20 grains.—Mfrs.: Wm. R. Warner & Co., Philadelphia, Pa.

TAO is a so-called "solid emulsion" or "emulgate" containing, according to reports, 2.38 per cent. of lecithin, 90.48 per cent. of protein, 5 per cent. of balsam of peru, 1.97 per cent. of calcium biphosphate and 0.17 per cent. of sodium chloride. As this powder is difficult to take, it is employed in the form of waffles, each of which represents 0.5 gram of balsam peru, 0.25 gram of lecithin, 9.25 grams of roborat, 5 grams of so-called nougat paste (almonds and chocolate), and 2 grams of waffle mass. It is used as a nutritive, especially in phthisical subjects.—Mfr.: Dr. Plorkowski, Berlin, Germany.

TAPHOSOTE also called *creosote tannophosphate*, which is incorrect, as creosote is not a simple base, is said to be formed from the creosote phosphoric acid ester of tannin (another impossible proposition), occurs as a grayish-yellow syrupy liquid, and is used as a substitute for creosote, particularly in tuberculosis and other chronic diarrheas. Dose, 15 to 30 minims three times daily, in pearls or capsules, or with milk. Marketed as 0.5 gram pearls.—Mfrs.: Lambiotte Frères, Paris, France.

TAR-DERMASAN is a dermasan soap containing about 5 per cent. of inspissated liquor carbonis detergens and 10 per cent. of beech-wood tar. It forms a brown, soft, almost liquid mass, completely soluble in alcohol. Ac-

according to Dr. M. Steiner it is non-irritating and constitutes an excellent preparation of tar.—Mfr. Fritz Friedländer, Berlin, Germany.

TAROLIN CAPSULES contain salol, oil of sandalwood, and extract of cubebs, and are employed in gonorrhea, cystitis, and other catarrhal affections.—Mfr.: H. Zadek, Breslau, Germany.

TARTARLITHINE is a trade designation for *lithium bitartrate*, small white crystals or crystalline powder, soluble in water, and employed largely in gouty and suppurative gingivitis. Dose, 5 to 10 grains three times daily.—Mfrs.: McKesson & Robbins, New York.

TARTROPHEN is *para-phenetidin tartrate*, a product apparently identical with the more recent *vinopyrin* and analogous therapeutically to citrophen (phenetidin citrate), and used like it as an antipyretic and analgesic. Dose, $7\frac{1}{2}$ to 15 grains.

TEBEAN preparations are immunizing and curative agents in tuberculosis of man and animals. The article intended for cattle is called *bovo-tebean*. Both products are used subcutaneously.—Mfrs.: E. Schering, Berlin, Germany.

TEBECIN MARPMANN is an alcoholic liquid extract of blood coagula from calves and horses immunized against tuberculosis. It is employed in consumption. Dose, 5 to 15 drops, thrice daily.—Mfrs.: Institut. G. Marpmann, Leipzig, Germany.

TEGMIN is an emulsion of wax, acacia and water, containing 5 per cent. of zinc oxide and a little lanolin. It is used as a skin varnish or protective, and as a vehicle for skin remedies.

TEGONES.—See under *gelones*.

TENALIN is an English preparation of areca nut, which is claimed to contain the vermifuge and anthelmintic alkaloids arecaine, arecaldine and guvacine, but to be relatively free from the toxic arecoline. It is exploited as a worm remedy.

TERPIN HYDRATE, BENZOINATED, is a compound of terpin hydrate and benzoic acid described by Pietro Casaria as obtained by dissolving equal molecules of the two components in boiling water and cooling. It is almost insoluble in cold water. It is put forward as an antiseptic antiscatarrhal in phthisis, chronic bronchitis, etc.

TERPIN HYDRIODIDE (or *iodohydrate*) is known on the markets as *chevadol*, which see.

TESTADEN is a lactose trituration of dried extract of bull's testicles, standardized so that 1 part represents 2 of fresh organ. It is used in spinal and nervous diseases, in impotence, neurasthenia, etc. Dose, 15 to 30 grains.—Mrs.: Knoll & Co., Ludwigshafen (Germany) and New York.

TESTICLE EXTRACTS have been claimed to increase muscular energy 10 to 20 per cent. and to increase oxidation. They have been used in obesity, neurasthenia, prostatic hypertrophy and many other conditions, but the results have been rather uncertain.

TESTIDIN is a preparation of fresh bull's testicles in extract form; and **TESTIN** is a similar product in tablet form. Their action is analogous to that of testaden.

TESTON.—See under Tannin-organotherapeutic Preparations above.

TETANUS ANTITOXIN.—See under serums (antitetanic.)

TETRAIODOPHENOLPHTHALEIN.—See *nosophen*.

TETRAIODOPHENOLPHTHALEIN-BISMUTH.—See *cu-dozin*.

TETRAIODOPHENOLPHTHALEIN-MERCURY is described under *apallagin*

TETRAIODOPHENOLPHTHALEIN-SODIUM is *antiosin*.

TETRAIODOPYRROLE is a chemical synonym of the official *iodole*.

TETRALGIN is a nervine consisting, according to Dr. F. Zernik, essentially of coca and lithium and strontium salts.

TETRAMETHYLAMMONIUM HYDROXIDE, $(C_2H_5)_4N.OH$, is marketed only as 10 per cent. aqueous solution, which is colorless, alkaline, bitter, and caustic; turns pinkish with age. It is used in rheumatism and gout. Dose, 10 to 20 minims three times daily, well diluted.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

TETRAMETHYLTHIONINE HYDROCHLORIDE is the new pharmacopœial designation for pure, medicinal *methylene blue*.

TETRANITROL is a terse synonym of *erythrol tetrani-trate*.

TETRONAL or *diethylsulphonedithymethane*, $(C_2H_5)_2C.(C_2H_5.SO_2)_2$, occurs as shining leaflets readily soluble in alcohol, sparingly soluble in water. It was introduced as a hypnotic and nerve sedative like sulfonal, but has been withdrawn from the American market. Dose, 15 to 30 grains.

TEUCRIN Mosetig is a sterilized extract of *teucrium scordium*, marketed in 2 c.c. hermetically sealed tubes, and used in old abscesses, fungous adenitis, lupus, etc. Dose, 3 c.c. injected near the diseased part.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

THALETTS are small blocks of chocolate each containing as active ingredient $\frac{1}{2}$ grain of phenolphthalein. They are used as a laxative. Dose, 2 to 4 blocks for

adults; children 1 block.—Mfr.: H. K. Mulford Co., Philadelphia.

THALLIUM ACETATE (*thallous acetate*), $\text{TlC}_2\text{H}_3\text{O}_2$, occurs as white crystals, soluble in water and alcohol; used in syphilis and in phthisical night sweats. Dose, $1\frac{1}{2}$ to 3 grains at bedtime. Often causes the hair to fall out.—(Nonproprietary.)

THALOCOL is the name of tablets each containing $\frac{1}{2}$ grain of phenolphthalein and $\frac{1}{6}$ grain of calomel.—Mfrs.: Abbott Alkaloidal Co., Chicago, Ill.

THALOSEN is a laxative preparation containing as its active ingredients 1 grain of phenolphthalein, with sulphur, senna and aromatics.—Mfr.: Abbott Alkaloidal Co., Chicago, Ill.

THANATOL.—See *guethol*.

THAOLAXIN is powdered fucus with the addition of extracts of various rhamnus species. It is exploited as a laxative.

THEOBROMINE ACETYLMETHYLENESALICYLATE is described under its trade designation, *diurazin*.

THEOBROMINE-LITHIUM.—See *theobromose*.

THEOBROMINE and **LITHIUM BENZOATE**, also known by the trade name *uropherin B*, occurs as a white powder, containing 50 per cent. of theobromine, and soluble when fresh in 5 parts of water, but readily decomposing on exposure. It is used as a diuretic. Dose, 5 to 15 grains, in powders or capsules.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

THEOBROMINE and **LITHIUM SALICYLATE**, also designated *uropherin S*, occurs as a white powder, decomposing on exposure, and used in the same cases and doses as theobromine and lithium benzoate.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

THEOBROMINE SALICYLATE, $\text{C}_7\text{H}_5\text{N}_4\text{O}_2\text{C}_7\text{H}_5\text{O}_2$, is claimed to be a true salt of theobromine. It forms white needles, sparingly soluble in water without decomposition. It is used as a diuretic and urinary antiseptic. Dose, $7\frac{1}{2}$ to 15 grains.—(Nonproprietary.)

THEOBROMINE-SODIUM and **SODIUM ACETATE**.—See *agurin*.

THEOBROMINE-SODIUM and **SODIUM ANISATE**.—See *anisotheobromine*.

THEOBROMINE-SODIUM and **SODIUM FORMATE**.—See *thephorin*.

THEOBROMINE-SODIUM and **SODIUM IODIDE**.—See *eustenine*.

THEOBROMINE-SODIUM and **SODIUM LACTATE**.—See *theolactin*.

THEOBROMINE-SODIUM and **SODIUM SALICYLATE** (*theobromine sodio-salicylate*; theobromine and sodium

salicylate) occurs as a white, odorless powder, decomposing on exposure. It is used as a diuretic, especially in post-scarlatinal nephritis. Dose, 15 grains 5 or 6 times daily, in powder with water. Also marketed as *diuretin* (Knoll).

THEOBROMOSE is *theobromine-lithium*, that is, theobromine in which one atom of hydrogen has been replaced by an atom of lithium. It occurs as silky needles that are freely soluble in water (in about $\frac{1}{2}$ part). On standing for any length of time the aqueous solutions become turbid, owing to the formation of lithium carbonate and the separation of theobromine. The action of theobromose is said to be 4 to 5 times as powerful as that of theobromine.

THEOCIN is the trade name for *synthetic theophyllin*. The article is fully described under theophyllin.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

THEOCIN-SODIUM ACETATE.—See *acet-theocin-sodium*.

THEOCIN SOLUBLE.—See *acet-theocin-sodium*.

THEOLACTIN is a trade name applied to *theobromine-sodium and sodium lactate*, a white, odorless, hygroscopic, bitter powder, soluble in about 16 parts of water to yield an alkaline solution, sparingly soluble in alcohol, and almost insoluble in ether or chloroform. It is very sensitive to carbon dioxide, hence is very prone to decompose on exposure to the atmosphere. The article is offered as a diuretic. Dose, 8 to 15 grains several times a day; it may also be employed by rectal injection.—Mfrs.: Zimmer & Co., Frankfort-on-M.; agts.: C. Bischoff & Co., New York.

THEONACET is a trade name applied to *theobromine-sodium and sodium acetate*, a substance also known as *agurin*.

THEONASAL is a trade name applied to *theobromine and sodium salicylate* by G. & R. Fritz, Vienna, Austria.

THEOPHYLLIN is an alkaloid contained in tea leaves, *dimethylxanthine* 1:3, an isomer of theobromine ($C_7H_8N_4O_2$). It is a white, odorless, bitter powder, soluble in about 180 parts of water, sparingly soluble in alcohol and insoluble in ether. It is used as a diuretic. Dose, 3 to 5 grains in warm tea three or four times daily, after meals.—Mfrs.: Boehringer & Soehne, Mannheim, Germany; agts.: Merck & Co., New York.

THEOPHYLLIN-SODIUM is the sodium salt of the preceding, somewhat more freely soluble in water, and used for the same purposes, but in slightly larger doses (6 grains).

THEOPHYLLIN-SODIUM and SODIUM SALICYLATE is a still more readily soluble compound of theophyllin, given as a diuretic in doses of $7\frac{1}{2}$ grains three or four

times daily, in solution. It and theophyllin-sodium are said to irritate the stomach less than does theophyllin itself.

THEOPHYLLIN SYNTHETIC is marketed under the name *theocin*.

THEPHORIN is a double salt of *theobromine-sodium* and *sodium formate*, a diuretic in which the salicylic acid has been replaced by formic acid. It occurs as a white, odorless, saline-bitter powder, soluble in 10 parts of water forming an alkaline solution which on standing for any length of time turns cloudy from separation of theobromine. It contains 62.5 per cent. of theobromine. (See caution as to formates under formaldehyde.) It is used as a diuretic. Dose, $7\frac{1}{2}$ grains two or three times a day as powders or tablets. Also marketed as $7\frac{1}{2}$ -grain tablets.—Mfrs.: Hoffmann-La Roche Chem. Works, Basle and New York.

THERAPOGEN is the fanciful name of a disinfectant and deodorant, defined as "the water-soluble compounds of various terpenes with the naphthalin group;" an oily, saponaceous liquid of pleasant odor and used on wounds in 30 per cent. solution.—Mfr.: Max Doenhardt, Cologne, Germany; agts.: Lieber & Co., New York.

THERMIOL is a 25 per cent. solution of *sodium phenylpropionate*; see the latter heading.—Mfr.: Dr. Theo. Schuchardt, Görlitz, Germany.

THERMODIN is the terse name for *acetylparaethoxyphenylurethane* (*phenacetin-urethane*), $C_6H_5 \cdot (C_2H_5O) \cdot H \cdot CO_2 \cdot C_2H_5 \cdot CO \cdot CH_3$. The drug occurs as colorless, odorless and tasteless crystals, soluble in 2600 parts of water, and is used as an antipyretic and analgesic, like acetanilid. Dose, 5 to 20 grains, as powders.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

THERMOFUGE is an antiseptic poultice composed of aluminium silicate, glycerin, boric acid, menthol, thymol, oil of eucalyptus and ammonium iodide, and used in inflammations. (An analogous product is now official under the name *cataplasma kaolini*).—Mfrs.: Parke, Davis & Co., Detroit, Mich.

THERMOGENE is a counter-irritant and anodyne cotton impregnated with the active principles of capsicum frutescens. It is employed in respiratory colds, lumbago, rheumatic pains, etc.—Mfr.: Pharmacist Verganover, Brussels, Belgium.

THERMOL is defined as *acetyl-salicyl-phenetid*in, and occurs as a white, odorless, tasteless, crystalline powder. It acts as an antipyretic and analgesic. Dose, 5 to 15 grains. Marketed also as tablets of various sizes.—Mfrs.: Organic Chem. Co., Philadelphia, Pa.

THEYOLIP is the new name for *thiolan*.—Mfr.: Conrad Edel, Halle, Germany.

THIAL is the trade name of *hexamethylenetetramine oxymethylsulphonate*, a chemical occurring as a white, odorless powder, readily soluble in water. It is used as a disinfectant, deodorant and topical antihydrotic in $\frac{1}{2}$ to 2 per cent. solutions, medicinally and for general use.—*Thial liquid* is a 50 per cent. solution of thial. See caution under *formaldehyde*.—Mfr.: P. Gloess, Solothurn, Germany.

THIALDIN is said to result from the action of ammonia on trithialdehyde, and is offered as a cardiac stimulant.

THIALION is a "laxative compound of lithium, sodio-trilithic anhydrosulphate, $3\text{Li}_2\text{O} \cdot \text{NaO} \cdot \text{SO}_3 + 7\text{H}_2\text{O}$." According to analyses made at the chemical laboratory of the American Medical Association, the preparation is "a mixture consisting chiefly of sodium sulphate and sodium citrate with very small amounts of lithium, the average of several estimations indicating the following composition: sodium citrate 58.6 per cent.; anhydrous sodium sulphate 26.6 per cent.; sodium chloride 3.3 per cent.; anhydrous lithium citrate 1.8 per cent.; water 9.7 per cent." Used in gouty conditions, cystitis, etc. Dose, a heaping teaspoonful in hot water, usually before breakfast.—Mfrs.: Vass Chem. Co., Danbury, Ct.

THIARSOL is *colloidal arsenic trisulphide*, marketed in sterilized ampuls for hypodermic use and in liquid form for oral administration.

THIDEROL is a syrup containing 2 per cent. of gualacol and employed in laryngeal and pulmonary affections. Dose, 1 to 2 teaspoonfuls, three times daily.—Mfr.: C. Hermann, Basle, Switzerland.

THIEUKALYPTOL is the name latterly applied to *sano-sin*, which title see.

THIGENOL is defined as the sodium salt of the sulphonic acid of a synthetic sulpho oil (derived from oil of sweet almond); a dark-brown syrupy liquid, containing 10 per cent. of sulphur organically combined, specific gravity 1.062, of faint sulphurous odor and empyreumatic taste; soluble freely in distilled water, diluted alcohol, glycerin or chloroform; miscible with oils and ointment bases. Hard (calcareous) water and acetic or mineral acids cause precipitation in its solutions. It is used in skin and female diseases, and internally, like ichthyol; its applications are odorless. Dose, 3 to 10 grains, in peppermint water, three times daily.—Mfrs.: Hoffmann-LaRoche Chem. Works, Basle and New York.

THILANIN is a sulphurated wool fat containing 3 per cent. of sulphur and employed in eczema and prurigo.—Mfrs.: Ver. Chem. Werke, Charlottenburg, Germany; agts.: C. Bischoff & Co., New York.

THILAVEN is a new sulphur preparation "containing 5 per cent. total sulphur, of which 15 per cent. is organ-

ically combined as readily absorbable thiozonide sulphur." It is "essentially a solution of linalyl-acetate-theozonide, $C_{12}H_{20}O_2S_3$, in alkali thiozonate, Na_2S_4 or K_2S_4 ." It is intended for use for artificial sulphur baths, as well as a supersessor of ichthyol chiefly in gynecological and dermatological diseases, but also in other chronic inflammatory conditions such as rheumatism, etc.—Mfr.: Chemische Fabrik Helfenberg, Helfenberg (Saxony); agts.: Reinschild Chem. Co., New York.

THIOSSIA is a nutritive which is said to contain lecithin, legumins, hemoglobin and cacao.

THIOCOL (*potassium ortho-guaiacolsulphonate* or *sulphoguaiacolate*), $C_8H_8(OCH_3)OH.SO_3K$, occurs as a white, odorless powder, of slightly bitter taste and sweetish after-taste; soluble readily in water or syrup, slightly in alcohol, and insoluble in ether or oils. It is used as a palatable, odorless substitute for guaiacol, in tuberculosis, typhoid fever, etc., internally. Dose, 5 to 20 grains, three times daily, in syrup or tablets (marketed also in these forms).—Mfrs.: Hoffmann-LaRoche, Basle and New York.

THIOCOLIN consists, according to the manufacturers, of potassium guaiacolsulphonate 6 parts, bismuth loretinate 1 part, distilled water 60 parts, and a "compound syrup" 33 parts. It is used in chronic bronchitis and phthisis chiefly. Dose, a teaspoonful to a tablespoonful thrice daily.—Mfrs.: Chem. Fabrik "Erfurt," Ilversgehofen, Germany.

THIODIN is a compound of ethyl iodide and thiosinamine, used in locomotor ataxia and other nervous diseases. Dose, $1\frac{1}{2}$ grains twice daily; hypodermically 15 minims of a 10 per cent. aqueous solution.

THIODINE is a combination of ichthyol, iodine, boryglycerin, hydrastine, carbolic acid and glycerin, marketed in the form of elastic suppositories containing 10 per cent. of the mixture. It is used in gynecological affections (pelvic cellulitis, cervical erosions, vaginitis, etc.), one suppository being inserted daily or two or three times a week.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

THIODINE is also the name of a compound of thiosinamine and ethyl iodide, $C_6H_{13}N_2SI$, occurring as white crystals melting at $68^\circ C.$, very freely soluble in water, sparingly soluble in alcohol and containing about 46 per cent. of iodine. It is used as a disinfectant and a softener of scar tissue, etc., like thiosinamine, as well as an alterative in parasyphilitic affections. Dose, $1\frac{1}{2}$ grains twice daily, as pills or subcutaneously (in 10 to 20 per cent. solution).—Mfr.: Dr. E. Bloch, St. Ludwig, Germany.

THIOFORM, *basic bismuth dithiosalicylate*, $(S.C_6H_4.OH.COOBiO)_2 + Bi_2O_3.2H_2O$, occurs as a yellowish-brown, odorless powder, containing 72 per cent. of bismuth oxide and about 28 per cent. of dithiosalicylic acid. It is insoluble in the common solvents. It is used chiefly as a

drying wound antiseptic and dermic; also as a gastrointestinal astringent and antiseptic. Applied externally like iodoform. Dose, 5 to 15 grains.—Mfrs.: Speyer & Grund, Frankfort-on-M., Germany; agts.: Otto Hann & Bro., New York.

THIOL is a water-soluble mixture of sulphurated and sulphonated petroleum oils. It is obtained by heating certain paraffin oils with 10 per cent. of sulphur and neutralizing with ammonia. *Liquid* thiol occurs as a brownish-black liquid of faintly bituminous odor resembling that of Russia leather, and containing about 1.8 to 2 per cent. of sulphur; soluble freely in water or glycerin, moderately in alcohol, and sparingly in ether. *Dry* thiol is the liquid form evaporated to dryness and pulverized; a brown powder of bituminous odor and bitter, slightly astringent taste, and containing 8 to 9 per cent. of sulphur. The liquid form is used pure or in ointments or solutions in skin and female diseases, like ichthyol, also internally. Thiol powder is employed chiefly in intertrigo, weeping eczema, discharging wounds, etc., usually pure; internally it is used as an alterative and anticatarrhal. Dose, 2 to 5 grains three times daily, in peppermint water or pills.—Mfrs.: J. D. Riedel Co., Berlin and New York.

THIOLAN, also designated as *unguentum sulfuratum mite*, *sulpholan*, *theyolip*, is a 3 per cent. sulphur ointment in which the sulphur is partly dissolved and partly suspended. Dr. Vorner has used it with good results in various skin diseases.—Mfr.: Kreutz Apotheke, Leipsic, Germany.

THIOPHEN DIIODIDE, $C_6H_4I_2S$, results from the action of iodine and iodic acid on thiophen, and occurs as a crystalline powder that is readily soluble in alcohol and ether and employed as a succedaneum for iodoform as a vulnerary.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

THIOPINOL for baths is said to consist of alcohol, ethereal oil of pine, sulphur or a sulphide, and glycerin. The contents of one bottle is used to prepare a sulphur bath of pleasant odor. *Thiopinol ointment*, used in cutaneous affections, is said to consist of 18 per cent. of ethereal oil of pine, 1.75 per cent. of "thiopinol," 1 per cent. of glycerin, 0.75 per cent. of beta-naphthol, and 78.5 per cent. of a mixture of lanolin and petrolatum. *Thiopinol soap* is marketed in two strengths, 5 and 10 per cent.—Mfr.: Chem. Fabrik Veehelde near Braunschweig, Germany.

THIORESORCIN, $C_6H_4O_2S_2$, is obtained by the action of sulphur on resorcin-alkali. It occurs as a yellowish-gray powder, slightly soluble in alcohol or ether and insoluble in water. It is used in place of iodoform as a dusting

powder or ointment (5 per cent.)—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

THIOSAPOL is a generic name for soda soaps containing sulphur chemically combined with unsaturated fatty acids and used in skin diseases. The corresponding potash soaps (thiosavonals) are described under *savonal*.—Mfrs.: J. D. Riedel Co., as above.

THIOSAVONAL.—See under *savonal*.

THIOSINAMINE (*allylsulphocarbamide*; *allylsulphourea*; *rhodalin*), $\text{CS}(\text{NH}_2)\text{NHC}_3\text{H}_5$, occurs as colorless, bitter crystals, of faint garlicky odor; soluble in about 3 parts of alcohol, moderately in ether, and slightly in water. It is prescribed internally, and hypodermically as a resolvent, in cicatrices, strictures, corneal opacities, chronic deafness, etc. Dose, $\frac{1}{2}$ to 2 grains, in capsules or tablet triturates three times a day, or subcutaneously two or three times a week in 10 to 15 per cent. alcoholic solution with 20 per cent. of glycerin.—(Nonproprietary.)

THIOSINAMINE-ETHYL IODIDE.—See *thiodine*.

THIOSINAMINE AND SODIUM SALICYLATE.—See *fibrolysin*.

THIOVINAL, recommended in affections of the respiratory tract, consists, according to the manufacturers, of guaiacol (6), extract of thyme (20), distilled water (40), and a compound (?) syrup (34). Dose, $\frac{1}{2}$ to 2 teaspoonfuls, after meals.—Mfrs.: Chem. Fabrik "Erfurt," Ilversgehofen, Germany.

THIOZONE. Erdmann has shown that sulphur under certain conditions forms a compound analogous to ozone, called thiozone $\text{S}=\text{S}=\text{S}$. This substance has the property of adding itself to chains containing double bonds, especially when the double linkage is located at the end of the chain. Thus on treating linalyl acetate with thiozone, the thiozonide is formed which reacts with sodium sulphide forming a thiozonidate—also called thiozone. This product, which is odorless, is said to have many advantages over organic sulphur compounds and is recommended in scabies, etc.

THIURET, $\text{C}_2\text{H}_7\text{N}_2\text{S}_2$, occurs as an odorless, crystalline powder practically insoluble in water but easily soluble in alcohol or ether. It is offered as a drying wound-antiseptic.

THOMAQUA, a remedy for seasickness, has been analyzed by Richter, who found it to contain about 25 per cent. of sodium bromide, 60 per cent. of potassium bromide, 10 per cent. of starch, 2 per cent. of antipyrin, and 3 per cent. of a vegetable extract, probably that of rhubarb or cascara sagrada.

THORIUM NITRATE, $\text{Th}(\text{NO}_3)_4 \cdot 4\text{H}_2\text{O}$, occurs as white, crystalline conglomerations, readily soluble in water. Dr. S. Tracy latterly uses it by inhalation in

tuberculosis, and as a 25 per cent. paste in parasitic skin diseases.—(Nonproprietary.)

THYMALKA is an alkaline antiseptic solution, each fluid ounce of which is said to represent sodium bicarbonate 16 grains, sodium borate 4 grains, sodium benzoate 6 grains, sodium salicylate 2 grains, menthol $\frac{1}{8}$ grain, thymol $\frac{1}{8}$ grain, camphor $\frac{1}{8}$ grain, oil eucalyptus $\frac{3}{8}$ minim, and methyl salicylate $\frac{1}{8}$ minim.—Mfr.: H. K. Mulford Co., Philadelphia, Pa.

THYMIDOL is *methylpropylphenolmenthol*. It is a condensation product of thymol and menthol that is not affected by cold. It is prepared by a patented process, and is employed as an antiseptic in the treatment of mouth and nose troubles, etc.—Mfrs.: Hesse & Goldstaub, Hamburg, Germany.

THYMIODIDE is a combination of thymol iodide, bismuth oxyiodide, and boric acid, occurring as a salmon-colored, odorless powder, only partly soluble in the usual solvents. It is employed as a wound antiseptic in place of iodoform.—Mfrs.: H. K. Wampole Co., Philadelphia, Pa.

THYMOBROMAL is a syrup of bromoform, extract of thyme, extract of chestnut leaves, compound extract of senega, and bromal hydrate, each fluid dram containing four drops of bromoform. It is advertised as a remedy for whooping-cough.—Mfr.: Dr. E. Bloch, Basle, Switzerland.

THYMOCHROM. See *phymochrom*.

THYMOFORM or *thymolform* is a condensation product of thymol and formaldehyde, occurring as a yellowish, tasteless powder of faint thymol-like odor; readily soluble in ether, alcohol, chloroform or olive oil; insoluble in water or glycerin. It is used as a wound antiseptic, in place of iodoform. See caution under *formaldehyde*.—Mfr.: Dr. G. F. Henning, Berlin SW, Germany.

THYMOL ETHYLBENZOATE is claimed to be identical with *arhovin*.

THYMOL-URETHANE.—See *thymotal*.

THYMO-PERCHA is said to contain thymol, oil of eucalyptus and rubber.

THYMOSPASMIN is a concentrated fluidextract of thyme containing some bromoform and offered as a whooping-cough remedy. Dose, 1 to 6 drops, according to age, every two hours.—Mfr.: Cartaz Pharmacy, Paris, France.

THYMOTAL (*thymol carbonate; thymol-urethane; tyratol*) is an odorless, tasteless, white, neutral substance, used as a vermicide. Dose (children), $7\frac{1}{2}$ to 15 grains three or four times daily for four days, followed by a laxative.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

THYMOMEL SCILLÆ is a honey extract of *thymus serpyllum* and squill, used in whooping-cough, laryngeal and bronchial catarrhs, etc.

THYMOTOL is a brand of *dithymol diiodide*.

THYMOXOL is a 3 per cent. solution of hydrogen peroxide containing also 1 per cent. of thymol and about 38 per cent of alcohol. It is used in 10 to 25 per cent. solution as a disinfectant and deodorant.—Mfr.: C. Raspe, Weissensee near Berlin; agts.: C. Bischoff & Co., New York.

THYMUS DESICCATED is said to consist of the fresh thymus gland of the calf freed from fat, cleaned, dried and powdered, without the addition of preservative or diluent. It occurs as a light-yellow powder having a peculiar odor and partly soluble in water. It is used in the treatment of exophthalmic goiter, rickets, hemophilia, and infantile marasmus and atrophy. Dose, 2 to 5 grains three times daily. Marketed also as 1-grain tablets.—Mfrs.: Armour & Co., Chicago and New York.

THYMUS GLAND has been employed in exophthalmic goiter, rickets, tuberculosis, hemophilia and infantile marasmus and atrophy; its use in the latter conditions is said to be the most promising.

THYMYL TRICHLORACETATE occurs as water-soluble crystals, soluble also in alcohol and ether. It is employed as a caustic and antiseptic, on new growths, indolent ulcers, etc.

THYOLEIN is a recent *ichthyol* substitute and analogue, marketed by a Swiss firm.—Mfrs.: Chuit, Naef & Cie, Geneva, Switzerland.

THYPTOL (*liquor eucalypti compositus*) is an antiseptic solution analogous to the official *liquor antisepticus*.—Mfrs.: John Wyeth & Bro., Philadelphia, Pa.

THYRADEN is a lactose trituration of dried extract of thyroid gland, 1 part of which represents 2 parts of fresh gland. It occurs as a light-brownish, sweetish, nearly odorless powder, employed as an alternative and antifat (myxedema, struma, obesity, etc.). Dose, 2 to 8 grains three times daily, as powders or tablets (marketed also as such).—Mfrs.: Knoll & Co., Ludwigshafen and New York.

THYREIN is synonymous with *iodothyrene*.

THYREOIDECTIN capsules contain 5 grains dried thyroid serum obtained from thyroidectomized animals; a reddish-brown, aromatized powder employed in exophthalmic goiter, struma, myxedema, etc. Dose, 1 to 2 capsules three times a day.—Mfrs.: Parke, Davis & Co., Detroit, Mich.

THYREOIDIN NOTKIN and **THYREODIN POEHL** are two European extracts of the thyroid gland.

THYREOTHEOBROMINE PILLS (Mladejovsky) are said to contain thyroid gland and theobromine-sodium salicylate, with quinine and podophyllin. They are offered for use in the treatment of obesity.

THYRESOL consists chiefly of the methyl ester of santalol, $C_{15}H_{22}OCH_3$. It is a colorless liquid of aromatic odor, almost insoluble in water, easily soluble in alcohol or ether. It is employed as an anticatarrhal and antigonorrheic in the place of oil of sandalwood. Dose, 8 minims three or four times daily, in milk or as pearls or tablets.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

THYROID GLAND has come into vogue as a remedy in struma, myxedema, obesity, hematuria and visceral hemorrhage. The dried gland representing about 5 parts of the fresh organ, is now official in the U. S. Pharmacopœia. Dose, 1 to 3 grains thrice daily, as tablets.

THYROID SERUM.—See *antithyroidin*.

THYROIDIN is a dried extract of sheep's thyroid, 1 part of which represents 6 parts of fresh gland. See *thyroid gland*. Dose, $\frac{1}{2}$ to 2 grains three times daily, as tablets (so marketed).—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

THYRON.—See under Tannin-organotherapeutic Preparations above.

TIMOTHEIN is a paratuberculin precipitated by alcohol from cultures of Timotheus' bacillus, and is used for the opthamo-reaction for tuberculosis.

TINCTURA OLEÆ EUROPÆÆ is prepared from the dried leaves of the olive with 60 per cent. alcohol. It is recommended by Sawyer as a general tonic, as well as a febrifuge and antiperiodic in place of tincture of cinchona. The dose is 15 to 30 drops.

TIODINE is what Dr. Weiss of Vienna calls a compound of ethyl iodide and thiosinamine, which melts at 68° C. and contains 46.49 per cent. of organically combined iodine. It occurs as white crystals, freely soluble in water, but sparingly soluble in alcohol. It is used subcutaneously, as well as intravenously, per os, and by intramuscular injection. It increases the urinary secretion and in therapeutic doses it is claimed does not irritate the gastrointestinal tract or renal epithelium. Dr. Weiss employs it hypodermically in 10 to 20 per cent. aqueous solution, in doses of 0.1 to 0.2 gram; internally, in the form of pills each containing 0.1 gram of the drug. Its main use has thus far been in locomotor ataxia.

TISOPIRIN is the name given pastilles, each containing 0.1 gram of aspirin, 0.00025 gram of arsenous acid and 0.1 gram of camphoric acid. They are put forward for use in pulmonary tuberculosis.

TOLUOL SUGAR is a trade name for *saccharin*.

TOLYPYRINE (*tolyantipyrine*; *paratolyl - dimethylpyrazolone*), $C_6H_4.CH_3.N.CH_3.N.CH_3.C:CH.CO.$, occurs as colorless crystals, soluble in 10 parts of water, readily soluble in alcohol. It is used as an antipyretic and analgesic. Dose, $7\frac{1}{2}$ to 15 grains, two to four times daily.—Mfrs.: J. D. Riedel Co., Berlin and New York.

TOLYSAL is *tolypyrine salicylate*; colorless crystals, readily soluble in alcohol, sparingly soluble in water. It is prescribed as an antirheumatic and analgesic. Dose, 45 to 90 grains per day.—Mfrs.: J. D. Riedel Co., Berlin and New York.

TONINERVIN is described as a water-soluble salt of quinine and iron containing 4.54 per cent. of the latter element. It is exploited as a bitter tonic, roborant and antipyretic. Dose, 1 to 5 grains.—Mfr.: Dr. A. Cantzler, Bamberg, Germany.

TONOGENUM SUPRARENAL is an analogue of *epinephrine* solution.—Mfr.: Gideon Richter, Budapest, Hungary.

TONOL is a collective brand name for the *glycerophosphates*, as marketed by Schering & Glatz, New York.

TORAL, according to the analysis of Drs. W. Lenz and R. Lucius, consists approximately of a mixture of 1 part of cresol and 2 parts of tribromphenolbismuth (xeroform). It is recommended as a capping for dental pulp and root fillings.—Mfr.: Adolf Kirch, Wiesdorf, Germany.

TORIL is an extract of beef containing also the albuminous constituents of the meat.—Elweiss und Fleischextrakt Co., Altona, Germany.

TOROSAN is a gualacol-hemoglobin compound, occurring as a brown powder, having a creosote-like odor and a disagreeable bitterish taste. It is insoluble in water and the rest of the ordinary solvents, but soluble with decomposition in alkaline liquids such as the intestinal secretion. It is intended for use as an antitubercular and as a hematinic in all conditions where its components are indicated. Marketed also in 0.1 and 0.25 gram pills. Dose, 3 to 12 grains three times a day.—Mfrs.: Dietrich & Co., Zurich, Switzerland.

TORULIN is described as an extra-strong, dry, permanent form of yeast intended for use in veterinary medicine in the treatment of staphylococcus and streptococcus infections, inflamed glands, suppurating wounds, etc.—Mfr.: Ferd. Capellen, Hanover, Germany.

TRANQUILLITUM, an ointment exploited for the treatment of rheumatism, etc., is said to contain henbane, aconitine, menthol-camphor, chloral-camphor and salicylic acid derivatives.

TRASULFAN is another counterpart of ichthyol manufactured by a Swiss firm.—Mfrs.: Reichold & Co., Benningen, Switzerland.

TRAUBELIN is said to contain "the active, nutritious constituents of the best variety of grapes in concentrated form," and to be free from alcohol. It is advertised as an invigorant in nervous affections, debility, pulmonary ailments and chronic catarrhs of the respiratory tract.—Mfr.: W. H. Zickheimer, Mayence, Germany.

TRAUMASAN is an ointment consisting, according to the manufacturer's statement, of a mixture of camphorated oil 1 part, carbolized oil 1 part, lead tannate in pulqueous form 1 part, boric acid ointment 1 part, zinc oxide ointment 2 parts and peruvian ointment 1 part. The ointment base used is anhydrous wool fat. The preparation is said to be serviceable in local hyperidrosis, chafing, bedsores, burns, etc.

TRAUMATOL (*iodocresine; cresol iodide*) is a compound of cresylic acid and iodine, occurring as a violet red, voluminous, odorless powder, containing 54 per cent. of iodine, insoluble in water or alcohol, slightly soluble in ether and freely soluble in chloroform. It is used as a wound antiseptic, in place of iodoform.—Mfrs.: Chevrier & Kraus, Courbevoile, France.

TRIACOL is an aromatic, non-saccharine solution of the sodium, potassium and ethyl-morphine salts of guaiacolsulphonic acid, which salts have been named sodacol, potassacol, and ethacol. It is used in phthisis and other chronic pulmonary affections. Dose, 1 to 2 dessert-spoonfuls three times daily.—Mfrs.: Alpers Chem. Co., New York.

TREUPEL'S TABLETS are said to contain aspirin, phenacetin, codeine and sodium sulphate.

TRIBROMANILIN HYDROBROMIDE is the chemical designation for *bromamide*.

TRIBROMOMETHANE is better known as *bromoform*.

TRIBROMPHENOL (*bromol*), $C_6H_2Br_3OH$, forms white to reddish crystals, soluble in alcohol, chloroform, glycerin or ether, insoluble in water. It is used as an external and internal antiseptic, in diphtheria, putrid wounds, typhoid fever, cholera infantum, etc. Dose, 1 to 3 grains, children in proportion. Applied externally in 4 to 10 per cent. paints, ointments or powders.—(Non-proprietary.)

TRIBROMPHENOL-BISMUTH.—See *xeroform*.

TRICHLORETHYLENENIMIDE is *chloralimide* (not chloralamide).

TRICHLORISOPROPYL ALCOHOL.—See *isopral*.

TRICHLORPHENOL Crystallized is described under *omal*.

TRICHOPHYTIN is the filtered culture of trichophyton (a genus of fungoid organisms parasitic upon the hair), freed from fungous elements and containing $\frac{1}{4}$ of 1 per cent. of carbolic acid as a preservative. It is used in

trichophytosis, herpes tonsurans and similar diseases of the hair.

TRIFERRIN is iron *paranucleinate*, and forms a reddish powder, containing 22 per cent. of iron, $2\frac{1}{2}$ per cent. of phosphorus, and 9 per cent. of nitrogen. It occurs as a tasteless powder, soluble in weak solution of sodium carbonate; insoluble in the common solvents. It is prescribed as a hematinic, in anemia, chlorosis, convalescence, etc. Dose, 5 to 10 grains, three times daily. Marketed also as 5-grain tablets.—Mfrs.: Knoll & Co., Ludwigshafen-on-Rh. and New York.

TRIFERRIN-MALTYL is a mixture of triferrin and extract of malt, marketed by Gehe & Co., Dresden, Germany.

TRIFERROL is an elixir of triferrin containing $1\frac{1}{2}$ per cent. of triferrin and 15 per cent. of alcohol. Dose, a tablespoonful.—Mfrs.: Knoll & Co., Ludwigshafen-on-Rh. and New York.

TRIFORMOL.—See *trioxymethylene*.

TRIGEMIN results from the action of butylchloral hydrate upon pyramidon. It occurs as long, white needles, of faint, aromatic odor and slight taste; soluble in about 65 parts of water, 10 parts of ether, and freely also in alcohol. Dr. Overlach recommends it in migraine, facial neuralgia, headaches from overwork, etc. Dose, $7\frac{1}{2}$ to 15 grains once or twice daily. It is hygroscopic and prone to turn yellow to brown in color, when it is said to cause gastric pain and hence is no longer eligible for use.—Mfrs.: Meister, Lucius & Brünig, Hoechst, Germany; agts.: V. Koechl & Co., New York.

TRIKRESIN is a mixture of the three isomeric cresols—meta-, ortho- and para-cresol. It occurs as an amber-colored liquid, of carbolic odor and soluble in water in all proportions but producing opalescent solutions. It is used as an antiseptic and disinfectant, in 1 per cent. to 5 per cent. solutions. It darkens on exposure to light.—Mfrs.: Wm. R. Warner & Co., Philadelphia, Pa.

TRIKRESOL is a natural mixture of para-, meta-, and ortho-cresol. It occurs as a colorless, oily liquid, specific gravity 1.045, soluble in about 45 parts of water and freely soluble in alcohol. It is used chiefly as a surgical disinfectant and antiseptic dermic, in $\frac{1}{2}$ to 1 per cent. solution.—Mfr.: E. Schering, Berlin, Germany; agts.: Schering & Glatz, New York.

TRIKRESOLAMINE.—See *kresamine*.

TRILOIDS is the name applied by a Philadelphia firm to its triangular antiseptic tablets (blue) containing mercuric chloride.—Mfrs.: Wm. R. Warner & Co., Philadelphia, Pa.

TRIMETHYLAMINE SOLUTION (*propylamine*) is a 10 per cent. aqueous solution of $N(CH_3)_3$. It occurs as a

colorless to pinkish liquid, having a strong fishy (herring-like) odor. It is employed as an 'antirheumatic. Dose, 15 to 45 minims.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

TRINITROPHENOL is a chemical synonym of *picric acid*, which see.

TRINOPHENONE is an aqueous solution of picric acid (trinitrophenol), used in burns.

TRION.—See under *tannin-organotherapeutic preparations*, above.

TRIONAL (*diethylsulphonemethylethylmethane*) is a trade name for the article, now official in the U. S. P. under the title *sulphonethylmethanum*, and is thus fully described in readily accessible works of reference.—Mfrs.: Farbenfabriken of Elberfeld, Elberfeld (Germany) and New York.

TRIOSINE is being advertised in the medical press as "a combination of the most desirable principles of tritium and pelosine with saline and herbal diuretics; a diuretic for use in nephritis." Dose, tablespoonful three or four times daily.—Mfrs.: Triosine Chem. Co., San Francisco, Cal.

TRIOTONOL Tablets constitute a "tonol" combination consisting of the glycerophosphate of calcium ($2\frac{1}{2}$ grains), of sodium ($2\frac{1}{2}$ grains) and of strychnine ($1/60$ grain). They are employed as "nerve tonics" and stimulants. Dose, 1 or 2 tablets three times a day.—Marketed by Schering & Glatz, New York.

TRIOXYACETOPHENONE.—See *gallacetophenone*.

TRIOXYMETHYLENE, commonly but erroneously called *paraformaldehyde* and *paraform*, also *triformal*, $(CH_2O)_3$, is a polymer of formaldehyde occurring as a white powder evolving formaldehyde even at ordinary temperature, but more rapidly when heated. It is insoluble in water, alcohol or ether; and is employed chiefly to generate formaldehyde gas by heating, and used only to a slight extent as an intestinal disinfectant in infectious diarrheas and externally, as a wart destroyer. Dose, 5 to 15 grains. See caution under *formaldehyde*.—(Non-proprietary.)

TRIPHENIN (*propionyl-phenetidin*), $C_{11}H_{15}NO_2$, is obtained by boiling a mixture of paraphenetidin and propionic acid, and occurs as a white, odorless powder, of faintly bitter taste, soluble in 2000 parts of water, more readily in alcohol and ether. It is used as an antipyretic and analgesic, similarly to phenacetin. Dose, 5 to 20 grains.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

TRISMA LAXATIF contains phenolphthalein, caramelized sugar, cocaine, and acacia.

TRISMA WORM LOZENGES are said to contain santolin, phenolphthalein, acacia and sugar.

TRITOLES are triturations of oils with substances capable of effecting minute subdivision of the oils. Malt extract is largely used, because it is excellently emulsifies the oils and makes stable emulsions. Castor oil, male fern oleoresin and cod liver oil tritoles are among the combinations marketed.—Mfrs.: Chem. Fabrik, Helfenberg, Germany; agts.: C. Reinschild Co., New York.

TROPACOCAINE HYDROCHLORIDE (*benzoylpseudo-tropeine hydrochloride*), $C_8H_{11}NO(C_2H_5O)$, is a salt of an alkaloid found in certain varieties of coca, but prepared also synthetically. It occurs as white needles freely soluble in water. It is employed as a local anesthetic in place of cocaine hydrochloride, the claims being made for it that it is less toxic and its solutions more stable than those of cocaine hydrochloride and sterilizable by boiling without decomposition. From 3 to 5 per cent. solutions are used.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

TROPHONINE is advertised as a nutritive and invigorator for invalids, "composed of beef, nuclealbumin and wheat gluten, together with the enzymes of the digestive glands." It is given in teaspoonful doses frequently.—Mfrs.: Reed & Carnrick, Jersey City, N. J.

TROPON is described as "a brittle, brown, slightly hygroscopic powder containing but a very small amount of inorganic admixture, say up to 1 per cent. of salts, traces of fat, and from 5 to 10 per cent. of water. The rest is pure albumen." It is not soluble in water, but "is readily dissolved by dilute hydrochloric acid (0.2 to 0.4 per cent.) and easily peptonized by pepsin." It is offered as a nutritive for the sick and debilitated. Dose, a table-spoonful three times daily, with soup, beef tea, cacao, etc.—Mfrs.: Tropon Works, Mühlheim (Germany) and New York.

TROPON-SANO is a mixture of tropon with dextrinized flour, offered as a nutritive.—Mfrs.: Tropon Works, Mühlheim (Germany) and New York.

TRUON is an ointment employed in excessive sweating and consisting of boric acid, formaldehyde and lanolin. See caution under formaldehyde.—Mfr.: Alex. Müller, Bad Kreuznach, Germany.

TRYGASE is defined as a perfectly pure yeast. It occurs as a light-gray powder, having the odor and taste of yeast and insoluble in water. It is intended for use like other yeast preparations. (See *levurin*.)—Mfrs.: J. D. Riedel Co., Berlin and New York.

TRYPAN BLUE is the tetrazo compound of toluidine and amidonaphtholsulphonate of sodium, of the formula $C_{24}H_{14}N_4O_4S_2Na_4$; a dye which has been found useful in combating parasitic diseases in animals, especially piroplas-

mosis (spotted or Texas fever). It is used by intravenous injection, in cold saturated aqueous solution (about 1 per cent.); dogs receiving from 2 c.c. to 15 c.c. (30 to 240 minims), cattle 150 c.c. to 200 c.c. (5 to 7 fluid ounces) per dose.—Mfr.: Meister, Lucius & Brünig, Hoechst-on-M., Germany; agts.: Victor Koechl & Co., New York.

TRYPAN RED ("trypanrot" in German) is an anilin dye belonging to the class of benzo-purpurins (dinitrated tolidin and naphthionic acid). It occurs as a brownish-red, water-soluble powder, and is given internally in cachets or hypodermically in a 1:80 solution in serum, in cases of gastric cancer, lymphodemia and tuberculosis.—Mfrs.: Dye makers in general.—(Nonproprietary.)

TRYPANOSAN is a halogen derivative of fuchsine said to have a destructive action on trypanosomes and is hence used in sleeping sickness.

TRYPSIN is the constituent of the pancreas gland and of pancreatin which digests albumin and fibrin. It occurs as a light-yellow powder having a faint odor and a meaty taste. It is almost completely soluble in water, but insoluble in alcohol or ether. It is employed as a topical and intestinal digestive, and acts best in a slightly alkaline medium. It has been used as a solvent of diphtheritic and other false membranes, and it is claimed to have the power to destroy the cells of cancer without acting on the healthy tissue. Locally it is applied with a brush or as a spray. About 6 grains are mixed with 2 grains of sodium bicarbonate and triturated in a mortar while adding 1 to 2 drams of distilled water. Internally the dose as a digestant is 2 to 5 grains three times daily about three hours after eating. It should not be used for hypodermic injection.—Mfrs.: Armour & Co., Chicago, Ill.

TRYPSOGEN Tablets contain the enzyme of Langerhans' glands, with the tryptic and amylolytic ferments of the pancreas, together with 1/100 grain of arsenic bromide in each tablet. They are employed in diabetes. Dose, 1 to 3 tablets thrice daily, after meals.—Mfrs.: G. W. Carnrick & Co., New York.

TUBARSYL is a preparation intended for use in tuberculosis, marketed in ampuls. No. 1 consists of 30 tubules, beginning with the dose 0.05 gram ($\frac{1}{4}$ grain) of sodium amidophenylarsinate and 0.1 milligram (1/640 grain) of tuberculin (old), and gradually increasing to 0.2 gram (3 grains) of sodium amidophenylarsinate and 0.1 milligram of tuberculin (old). The set of ampuls marked No. 2 consists of 30 tubules, the initial dose being 0.05 gram of sodium amidophenylarsinate and 0.1 milligram of "old" tuberculin, and gradually increasing to 0.2 gram of sodium amidophenylarsinate and 1 milligram (1/64 grain) of tuberculin. In both series the tuberculin is contained in every third dose. The solutions are used

intravenously or by intramuscular injection. (See caution under soamin.)

TUBERCULIN is a name applied to a large number of preparations of the tubercle bacillus. It was first prepared by Prof. Robt. Koch, whose article is now generally called *old* tuberculin, to distinguish it from the *new* tuberculins, that is, tubercle bacilli residue (TR) and bacilli emulsions (BE). The tuberculins are used both for diagnostic purposes and the treatment of tuberculosis. A list of the various ones will be found in the Price List supplement to THE DRUGGISTS CIRCULAR.

TUBERCULOCIDIN T C (Klebs) is a 1 per cent. solution of the bactericidal and antitoxic substance of tubercle bacilli, preserved with 0.2 per cent. of cresol. It is used per os in the various tubercular diseases. Dose for adults, 5 drops, gradually and cautiously increased to 30 minims. —Mfr.: Fr. G. Klebs, Berlin W, Germany.

TUBERCULOL is described as "tuberculous toxine free from secondary products; contains in concentrated form the toxines of both the culture fluid and the bacterial cells." It occurs as a brown powder, soluble in water. It is used for immunizing against tuberculosis as well as in the treatment of tuberculous affections.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

TUBOCURARINE.—See *curarine*.

TUKLIN is defined as an acid formalin alcohol ether, and is employed mixed with ethereal oils by inhalation in diseases of the throat and respiratory tract. See caution under *formaldehyde* —Mfr.: C. Fr. Hausmann, St. Galen, Switzerland.

TULASE is what Behring calls a honey-like liquid containing the constituents of Koch's bacillus and applicable intravenously, hypodermically or orally. The internal administration is said to serve for immunizing purposes, the subcutaneous and intravenous for curative purposes in existing tuberculosis.—Mfrs.: Behring's Serum-Werke, Berlin, Germany.

TUMENOL (*tumenolsulphonic acid*) is derived from bituminous mineral by dry distillation and subsequent treatment with sulphuric acid and alkalis. Three modifications are marketed: *tumenol paste*, from which the *tumenol oil* and *powder* are obtained. The oil is a dark-yellow viscid liquid, insoluble in water, but freely so in ether or alcohol. The powder is soluble in water. Tumenol is used in skin diseases chiefly; the oil pure or as a spirit; the paste in 5 to 10 per cent. ointments or tincture, and the powder in 2 to 5 per cent. solutions (on compresses) or with zinc oxide as dusting powder. Incompatible with ferric salts, potassium permanganate and corrosive sublimate.—Mfrs.: Meister, Lucius & Brünig, Höchst-on-M.; agts.: V. Koechl & Co., New York.

TUMENOL-AMMONIUM is an improved tumenol that yields better ointments than the older forms. Dr. Klingmüller states that it irritates less than the older preparations, while being equally efficacious. See *tumenol*.

TURICIN is defined as a "chemical compound of tannic acid and glutenin;" a flesh-colored powder, of unpronounced odor and taste, insoluble in the ordinary solvents but dissolving in dilute alkali solutions; tannin content about 21 per cent. It is used as an intestinal astringent. Dose, 10 to 30 grains. Marketed also as *baby turicin*, which consists of 20 per cent. of turicin, 70 per cent. of aleuronat, starch and corrigents.—Mfrs.: Blattmann & Co., Wädenswil, Switzerland.

TUSSICULIN is an external whooping-cough remedy, said to contain the ethereal oils of *serpyllum* and *persica vulgaris*, besides cajuput oil and the active principles (?) of alkanet.—Mfr.: O. Arens, Kaiserslautern, Germany.

TUSSIN EXTRACT is reported to consist of menthol, eucalyptol, thymol and malt extract. It is used in whooping-cough and other coughs.

TUSSIVA is a trade name adopted for a certain saccharated extract of chestnut leaves.—Mfrs.: Keller Bros., Freiburg, Germany.

TUSSOL (*phenylglycolantipyrin*; *antipyrin amygdalate* or *mandelate*), $C_{12}H_9CH.OH.CO.OH.C_{10}H_7N_2O_2$, occurs as a white, bitter powder, soluble in about 15 parts of water and 4 parts of alcohol, and decomposed by alkalies and milk. It is prescribed as an antispasmodic, chiefly in whooping cough. Dose, 2 to $7\frac{1}{2}$ grains, according to age, four to six times daily, in sweetened solution.—Mfrs.: Meister, Lucius & Brünig, Hoechst, Germany; agts.: V. Koechl & Co., New York.

TUSSOTHYM is described by the manufacturers as a "thyme distillate." According to Dr. F. Zernik, it is a faintly alcoholic distillate of thyme with probably several other indifferent drugs. The article is exploited mainly as a whooping-cough remedy.—Mfrs.: Neocithin Gesellschaft, Berlin, Germany.

TUTULIN is a pure vegetable albumin, occurring as a whitish, water-soluble, nearly odorless, tasteless powder, employed as a nutritive. Dose, teaspoonful or more per day in soup or other liquid food.—Mfrs.: Tollhausen & Klein, Frankfurt-on-M., Germany.

TYALID is a combination of ptyalin, pancreatin and malt diastase, used particularly in amylaceous dyspepsia. Dose, 5 to 10 grains. Marketed also as tablets and elixir.—Mfr.: G. W. Carnrick & Co., New York.

TYLMARIN is the name applied to *acetyl-orthocumaric acid*, an article occurring as colorless crystals. It is sparingly soluble in water and decomposed in the system into

its components. The substance is said to have the same action as acetylsalicylic acid (aspirin).

TYPHASE is another name for Klemperer's *typhoid fever antitoxin*.

TYPHENE, "the medicinal treatment for typhoid fever," is made by Drew-Stranahan-Hussey Co., Boston, Mass.

TYPHOIN is a sterilized culture of typhoid bacilli, used hypodermically in typhoid fever. Dose, 0.15 to 0.25 c.c. daily.

TYRATOL is described under *thymotal*.

TYRAMINE is a trade name adopted for *parahydroxy-phenethylamine*, a water-soluble active principle of ergot which has been isolated and synthesized by Dr. G. Barger, one of the discoverers of ergotoxine. It is credited with the property of stimulating the uterus to contract, and is believed to be identical with the active constituent or "hormone" of the human placenta. It is marketed as hypodermic tablets each containing 1/12 grain.—Mfrs.: Burroughs Wellcome & Co., New York.

TYROSAL is a trade name for *antipyrin salicylacetate*, described under *acopyrine*.

TYSIN is a trade name for a solution of *formaldehyde*. See caution under *formaldehyde*.

U

UL OINTMENT, recommended for the treatment of wounds, etc., contains sesame oil, ceresin and myrrh.

ULCEROL is a plaster containing a high percentage of balsam of peru. It is used particularly in ulcers of the leg and granulating wounds.

ULMARENE is defined as a natural mixture of the salicylic acid esters of certain higher aliphatic alcohols. It forms a heavy, yellowish-red, refractive liquid, of faint, salol-like odor, readily soluble in alcohol, difficultly soluble in ether and chloroform, and insoluble in water. It contains 75 per cent. of salicylic acid, and is used locally in rheumatism, neuralgia and gout, as a paint undiluted or in 30 per cent. ointment with lanolin containing 5 per cent. of menthol. Dose per application, 45 to 60 minims.—Mfr.: Société Parisienne des Produits Chimiques de Montereau, France.

ULYPTOL is an antiseptic consisting of a mixture of carbolic acid, eucalyptus oil and salicylic acid.

UNGUEMOL is "a fatty ointment-base miscible with water in all proportions; a translucent bland fat which is readily absorbed."—Mfrs.: John Bell, Hills & Lucas, London SE, England.

UNGUENT CADINOL COMPOUND is being advertised in the medical press as a remedy for eczema, erysipelas,

burns, etc., and is stated to be "a perfect combination of antiseptics in a perfect base." Nothing definite is published concerning its composition.—Mfrs.: C. F. Kirkendall & Co., Johnstown, Pa.

UNGUENTINE is an ointment representing, according to the manufacturers, "alum compound (non-irritating), phenol, ichthyol, zinc oxide, aromatic and antiseptic oils, and petrolatum and purified animal fat." According to an analysis made at the chemical laboratory of the American Medical Association, unguentine contains aluminium acetate (not alum), zinc oxide (or zinc carbonate), no cent. of phenol. It is used for burns and other inflammatory cutaneous lesions.—Mfrs.: Norwich Pharmacal Co., Norwich, N. Y.

UNGUENTOLE is a preparation similar to the older unguentine—"a non-irritant alum ointment with omoform 5 per cent., carbolic acid 3 per cent., ichthyol 5 per cent., with solidified petroline as a base." It is used in burns, ulcers, and other cutaneous affections.—Mfrs.: Penn. ichthyol or only the slightest traces, and less than 1 per Pharm. Co., Philadelphia, Pa.

UNGUENTUM CASEINI is a skin varnish used by Unna, consisting of alkali caseinate, glycerin, and petrolatum. It dries quickly and is easily removable by means of water. All sorts of medicaments save acids, which coagulate the casein, can be easily incorporated with it.—Mfr.: P. Beiersdorf, Hamburg, Germany; agts.: Lehn & Fink, New York.

UNGUENTUM CREDE is a 15 per cent. ointment of collargol, 5 per cent. of water, 10 per cent. of white wax, and 70 per cent. of benzoinated lard. It is used by inunction in mild cases of puerperal sepsis, in phlegmon, carbuncle and other infections; also as a prophylactic of septic infection after childbirth, etc. Dose, 45 grains per inunction.—Mfr.: E. Schering, Berlin, Germany; agts.: Schering & Glatz, New York.

UNGUENTUM DURUM is what F. Miehle calls an ointment base consisting of hard paraffin 4 parts, wool fat 1 part and liquid paraffin 5 parts.

UNGUENTUM FORMENTOLI contains 5 and 10 per cent. of formaldehyde, and a little menthol, in a glycerin and starch base, and is employed in excessive sweating of the feet. See caution under *formaldehyde*.—Mfr.: H. W. Bernatzek, Mödling, Austria.

UNGUENTUM GYNOCARDICUM is a mixture of 1 part of chaulmoogra oil and 3 parts of petrolatum. It is used in chronic rheumatism, leprosy and gout.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

UNGUENTUM HEYDEN is an ointment containing 45 per cent. of calomelol (colloidal calomel) and 2 per cent. of free mercuric. It is of smooth consistence, nearly odor-

less, and of pale-gray color. It is used by inunction in place of mercurial ointment in syphilis. Marketed in special tubes with graduated labels.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

UNGUENTUM MOLLE of F. Miehle is a mixture of 22 parts of hard paraffin, 10 parts of wool fat and 68 parts of liquid paraffin. With an equal weight of glycerin it yields a homogeneous, smooth ointment, and it readily takes up its own weight of water.

UNGUENTUM NAFTÆ is claimed to be identical with naftalan by the maker, Dr. A. Voswinkel, Berlin W, Germany.

UNGUENTUM PHYSIOLOGICUM consists, according to reports of 10 per cent. of "sal physiologicum", 40 per cent. of vaselin and 50 per cent. of lanolin.

UNGUENTUM PSORIATICUM is what Rosenberg names a mixture of 5 parts of chrysarobin, 2 of ichthyol and 3 of "unguentum zymoidini." As its name indicates, it is used in psoriasis.—Mfr.: Dr. Jos. Rosenberg, Berlin, Germany.

UNGUENTUM SALENI. See *salenol*.

UNGUENTUM SALVO PETROLIA is a brand of petrolatum, yellow and white, made by Mettenheimer & Simon, Frankfurt-on-M., Germany.

UNGUENTUM SAPO-SALICYLATUM (Bengen) is a superfatted soap containing 12 per cent. each of salicylic acid and salicylic acid esters. It is recommended by Dr. Reckhard in veterinary practice in the treatment of acute articular inflammations and in tendon inflammations of horses and cattle; also wherever a readily absorbed ointment of salicylic acid is indicated.—Mfrs.: Bengen & Cie, Hanover, Germany.

UNGUENTUM SEBO is, according to Fritz Meyer, an ointment base containing derivatives of naphtha in combination with albumin. It is said to readily take up zinc oxide, pyrogallol, sulphur, etc.

UNGUENTUM SULFURATUM MITE. See *thiolan*.

UNGUENTUM TERRALIS is an analogue of the official cataplasma kaolin.—Mfr.: Sharpe & Dohme, Baltimore, Md.

UNGUENTUM VEGETABILE is an ointment base consisting of an emulsion of wax and oil.

UNGUENTUM ZYMOIDINI. See *zymoidin*.

URALINE or *uralium* is *chloral urethane*, $\text{Cl}_3\text{C}(\text{OH})\text{H}\cdot\text{NO}\cdot\text{CO}_2\cdot\text{C}_2\text{H}_5$, occurring as a white powder insoluble in cold water and decomposed by boiling water. It is occasionally prescribed as a hypnotic. Dose, 30 to 45 grains.—(Nonproprietary.)

URANIUM NITRATE occurs as yellow crystals, soluble in water, alcohol or ether. It is used in diabetes. Dose, 1 to 2 grains, gradually increased to 15 grains, two or three times daily. Incompatible with chloral hydrate or lead acetate.—(Nonproprietary.)

URAPURGOL is the same as *helmitol*.

UREA (*carbamide*), $\text{CH}_4\text{N}_2\text{O}$, though by no means a new substance, has only in recent years come into vogue as a therapeutic agent. As is known, it is a constituent of urine; but it is also formed artificially by heating a solution of ammonium cyanate. It occurs as white crystals, soluble in water and alcohol, and is prescribed as a diuretic, antilithic and antitubercular—chiefly in renal calculus and phthisis. Dose, 10 to 20 grains, in solution.—(Nonproprietary.)

UREA-FORMALDEHYDE.—See *uroform*.

UREA QUINATE (*chinate*).—See *urol*.

UREA SALICYLATE is described under *ursal*.

UREOL is a granular, effervescent salt said to contain hexamethylenamine, sodium benzoate and lithium benzoate. Hexamethylenamine is a formaldehyde product; for a caution regarding such compounds see formaldehyde.—Mfr.: Viktoria-Apotheke, Berlin W, Germany.

URESIN is a name applied to the double salt *lithium and hexamethylenetetramine citrate*, a white powder soluble in water, intended as a uric acid solvent in gout, gravel, etc. Dose, 5 to 15 grains several times daily. (Not to be confounded with *urosine*.) See caution under *formaldehyde*—Mfrs.: Zimmer & Co., Frankfort-on-M., Germany; agts.: C. Bischoff & Co., New York.

URETHANE is the trade name for the official *ethyl carbamate*; it is also known as *ethyl urethane*, and as *carbamic acid ethyl ester*. Incompatible on trituration with antipyrin, butyl-chloral hydrate, camphor, carbolic acid, menthol, naphthol, resorcin, salol or thymol; also with acids or alkalies.—(Nonproprietary.)

URICEDIN is a yellowish compound said by the makers to consist of sodium citrate, sodium sulphate, sodium chloride, sodium acetate, sodium tartrate, sodium malate, iron, sodium pectinate and extractives. According to analyses made at the laboratories of the American Medical Association, the composition of uricedin is now found on the American market is approximately as follows: Anhydrous sodium sulphate 61.52 per cent., anhydrous sodium citrate 29.62 per cent.; sodium chloride 2.13 per cent., anhydrous citric acid 3.25 per cent., moisture 2.53 per cent., and undetermined 0.95 per cent. It is employed as a uric acid solvent in gouty manifestations. Dose, $\frac{1}{2}$ to 1 teaspoonful in hot water before breakfast.—Mfr.: J. E. Stroschein, Berlin, Germany; agts.: Fischer Chem. Importing Co., New York.

URICENE is a uric acid solvent in tablet form of undiluted composition. It is advocated for use especially in rheumatism.—Mfrs.: Woodbury Chem Co., Boston, Mass.

URIFORM (*not uroform*) is a urinary antiseptic and anticatarrhal, each dose (2 fluid drams) of which is said

to represent hexamethylenamine $7\frac{1}{2}$ grains, saw palmetto 5 grains, santal $2\frac{1}{2}$ grains, damiana $2\frac{1}{2}$ grains, and nux vomica $\frac{1}{4}$ grain.—Mfrs.: Schieffelin & Co., New York.

URISEPTIN is a urinary antiseptic and diuretic, "each fluid ounce of which contains formaldehyde combined with lithium dissolved in concentrated liquid extract of corn silk and couch grass, and will liberate a sufficient quantity of formaldehyde (24 grains) to impregnate the daily secretion of urine (45 to 50 fluidounces) to a 1:1000 solution. Dose, tablespoonful night and morning, or 1 to 2 tablespoonfuls four times a day, preferably in hot water." According to an analysis made at the laboratory of the American Medical Association, "the active ingredients of uriseptin are hexamethylenamine (about 25 grains to each fluid ounce) and lithium benzoate (about 11 grains to each fluid ounce), neither of which compounds is mentioned on the label."—Mfr.: Gardner-Barada Chem. Co., Chicago, Ill.

URISOL is a concentrated solution of lithium citrate, exploited as an antilithic and uric-acid solvent.—Mfrs.: G. & R. Fritz, Vienna, Austria.

URISOLVIN is said to be a mixture of urea with lithium citrate. It is claimed to be a uric acid solvent. Dose, 30 grains every 3 hours.—Mfr.: J. Mahl, Czernowitz, Austria.

URISTAMINE (Squire & Sons, London, Eng.) and URITONE (Parke, Davis & Co., Detroit) are two of the numerous trade names for *hexamethylenetetramine*.

UROCITRAL is the name applied to the double salt, *theobromine-sodium* and *sodium citrate* occurring as a white alkaline powder of saline-bitter taste. It has diuretic effect.

UROCOL is a trade name for tablets, each containing 0.5 gram of urea quinate (urol), 0.9 gram of milk sugar and 0.001 gram of colchicine. The article is used in gout. Dose, 3 to 5 tablets per day.—Mfrs.: Drs. Schütz & v. Cloedt, St. Vith, Germany.

UROFORM is a compound of urea with formaldehyde, also known as *urea-formaldehyde*. See caution under *formaldehyde*—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

UROGOSAN is a urinary antiseptic and antigonorrheic marketed as capsules, each of which contains 0.3 gram of gonosan and 0.15 gram of hexamethylenamine. Dose, 1 to 3 capsules four times daily.—Mfrs.: J. D. Riedel Co., Berlin and New York.

UROL (*urea quinate*) is a compound of two molecules of urea and one molecule of quinic acid, of the formula $C_7H_{12}O_6 \cdot (CO)_2(NH_2)_2$. It occurs as white prisms of acid reaction and readily soluble in water and alcohol. It is prescribed in gout, gravel and other morbid conditions ascribable to excess of uric acid. Dose, 15 to 30 grains.—Mfrs.: Drs. Schütz & v. Cloedt, St. Vith, Germany.

UROLYSIN is a compound of vanadium-sodium citrochloride with quinic acid (10 per cent.), combined as an effervescent powder. It is prescribed in gout.—Mfr.: A. Kruchen, Cologne, Germany.

URON is a urinary disinfectant to which the formula $\text{LiC}_{12}\text{H}_7\text{N}_3\text{O}_2$ is assigned by the makers, but which, according to analyses made at the chemical laboratory of the American Medical Association, is "not a chemical compound, but a mixture of lithium benzoate and hexamethylenamine in approximately the following proportions: lithium benzoate 58 per cent.; hexamethylenamine 42 per cent." Dose, 10 to 20 grains.—Mfrs.: Uron Chem. Co., St. Louis, Mo.

UROPHERIN.—See *theobromine-lithium* and *lithium benzoate* and *salicylate* respectively.

UROPURAL (*uropurin*) is the fanciful name applied by Werler to an extract of *uva ursi* with or without other drugs. The article is marketed as Tablets No. I, containing 0.25 gram of the extract alone (equal to 1 gram of the leaves); Tablets No. II, consisting of 0.25 gram each of the extract and salol; Tablets No. III, containing 0.25 gram each of hexamethylenetetramine and the extract of *uva ursi*; and tablets No. IV, each containing 0.25 gram each of aspirin and the extract. Used in cystitis, etc. See caution as to No. III under *formaldehyde*.—Mfr.: C. Stephan, Dresden N, Germany.

UROPURGOL is another trade name for *hexamethylenamine methylenecitrate*, better known as *helmitol* and *new urotropin*.

UROSANOL is the name applied to ready-made 1, 3 or 5 per cent. solutions of protargol marketed in a special injection apparatus by Berliner Hygiene Co., Berlin N, Germany.

UROSINE, advertised as *lithium quinate*, is in reality a mixture in tablet form of 0.5 gram of quinic acid, 0.15 gram of lithium citrate and 0.3 gram of sugar per tablet. It is readily soluble in water, sparingly in alcohol and insoluble in chloroform or ether. It is intended as a uric acid solvent in daily quantities of 4 to 10 tablets. Marketed also as *effervescent urosin*, a small teaspoonful of which represents 15 grains of urosine, and as a 50 per cent. unsweetened solution.—Mfrs.: Zimmer & Co., Frankfurt-on-M., Germany; agts.: C. Bischoff & Co., New York.

UROSTERILE Tablets No. I each contain 0.25 gram of dried extract of *pichi-pichi*; No. II contain 0.25 gram of the *pichi-pichi* extract with 0.125 gram each of salol and tannic acid. They are employed in diseases of the urinary organs.—Mfr.: Dr. A. Lewy, Berlin, Germany.

UROTROPIN is a trade name for a brand of *hexamethylenetetramine* (now official as hexamethylenamine).—Mfr.: E. Schering, Berlin, Germany; agts.: Schering & Glatz, New York.

UROTROPIN ANTISCLEROSIN is a combination of arteriosclerin and hexamethylenamine, and is employed in arteriosclerosis accompanied by cystitis. Dose, 2 to 4 tablets, three or four times a day.—Mfr.: Wm. Natterer, Munich, Bavaria (Germany).

UROTROPIN NEW is *urotropin methylenecitrate*, a chemical described under the commonly known trade name, *helmitol*.

UROTROPIN QUINATE (*chinate*)—See *chinotropin*.

UROTROPIN AND LITHIUM CITRATE.—See *uresin*.

URSAL is *urea salicylate*, and is used in rheumatism and gout in the same dose as sodium salicylate.—Mfr.: C. Erdmann, Leipsic-Lindenau, Germany.

URSAL D bears no relation to ursal, urea salicylate, used in rheumatism and gout, but is *paraphenylenediamine* as used by smokers' supply-houses.

URSIN is described as a compound of lithium and quinic acid analogous to if not identical with *urosine*. It is marketed in 50 per cent. solution and as effervescent powder.

URSTYAMINE is described chemically as *hexamethylenetetramine* and *lithium benzoate*; a white powder easily soluble in water. It is employed in gout, rheumatism, cystitis, etc. Dose, 15 grains every morning in carbonated water. (Not to be confounded with *uristamine*.) See caution under *formaldehyde*.—Mfrs.: Squire & Sons, London, Eng.

URTICOLIN is a dialyzed extract of nettlewort, employed in chronic urticaria.—Mfr.: A. Alves, Berlin W, Germany.

UTROGEN is said to have the same composition as *pyrenol* (benzoyl-thmyl-benzoyl-oxybenzoate). Like the latter, it is used in asthma, pulmonary affections, etc.—Mfr.: Dr. A. Voswinkel, Berlin W, Germany.

UTROS is a uterine tonic and sedative, each fluid ounce of which is said to represent cramp bark 30 grains, black haw 20 grains, hydrastis 30 grains, aletris 15 grains, squaw vine 15 grains, blue cohosh 15 grains, cascara sagrada 15 grains and "somnos" 160 minims.—Mfrs.: H. K. Mulford Co., Philadelphia, Pa.

UVA-SANTOL is a mixture of extracts of *uva ursi* and myrtle leaves with salol, marketed in 0.5 gram capsules and exploited as a gonorrhea remedy.—Mfr.: Ernst Funck, Radebeul, Germany.

V

VACCINES BACTERIAL. See *bacterins*.

VAGINOL OVULES each contain mercury oxycyanide 0.002 gram, sodium sozodolole 0.08 gram and alumnol 0.02 gram.—Mfr.: Apotheke zur Austria, Vienna IX, Austria.

VALDA is the name adopted for pastilles used in coughs, hoarseness, coryza, and other affections of the respiratory tract. It is reported that each pastille contains 0.0005 gram of eucalyptus oil, 0.002 gram of menthol, and 0.5 gram each of acacia and sugar, colored with chlorophyll.—Mfr.: H. Canonne, Paris, France.

VALENTA'S preparations are mixtures of ichthyolsalicyl with various medicaments. The following compound "absorption pills" of Dr. Valenta are marketed: No. I, containing ichthyolsalicyl with "diuretic mass"; No. II, ichthyolsalicyl-atoxyl pills, used in tuberculosis, diabetes, etc.; No. III, ichthyolsalicyl-hetol pills, that is, pills of ichthyolsalicyl and sodium cinnamate, employed in tuberculosis; No. IV, ichthyolsalicyl-lithia pills, prescribed in gout, gravel, etc.—Mfrs.: Lakemaier & Co., Mülheim, Germany.

VALEROBROMINE is a French specialty defined as *sodium bromovalerianate*, but presumably a mixture or double salt of sodium bromide and sodium valerianate. It occurs as a crystalline, water-soluble mass, and has the combined action of valerian and the alkali bromides. Dose, $7\frac{1}{2}$ to 20 grains.

VALERYDIN (*para-valerylphenetidin*), also known as *sedatin*, $C_6H_4(OC_2H_5)NH.C_6H_5O$, results when valerianic acid is heated with para-phenetidin, and forms needles soluble in alcohol. It is employed as a nerve sedative and antipyretic in doses of $7\frac{1}{2}$ to 15 grains several times daily.—Mfr.: C. Erdmann, Leipzig, Germany.

VALERYL-ACETYL-PHENOLPHTHALEIN. See *aperitol*.

VALERYLPHENETIDIN.—See *valerydin*.

VALIDOL is defined as *valerianic acid menthyl ester* or *menthyl valerianate*, $C_{10}H_{18}.C_6H_5O_2$, to which 30 per cent. of free menthol has been added. It occurs as a thick, colorless, clear liquid, of mild, pleasant odor, and cooling, slightly bitter taste. It is used as a nerve sedative, analgesic and carminative, in hysteria, gastralgia, seasickness, syncope, etc. Dose, 10 to 20 drops, on sugar or in capsules. *Camphorated validol* is a 10 per cent. solution of camphor in validol, used in debilitated conditions as a stimulant, and as a dental anodyne in toothache from carious teeth.—Mfrs.: Zimmer & Co., Frankfurt-on-M., Germany; agts.: C. Bischoff & Co., New York.

VALIFLUID is a trade name for a *fluidextract of valerian*, said to be prepared by a special process.—Mfrs.: Laboratory für Pharm. Präparate, Dresden, Germany.

VALINERVIN is an effervescent valerian and bromide mixture.

VALISAN is defined as a bromine compound of bornyval, containing 25.2 per cent. of bromine and recommended as a nerve sedative in the place of the older bornyval. It

is marketed in pearls.—Mfr.: E. Schering, Berlin, Germany; agts.: Schering & Glatz, New York.

VALOFIN is an aromatized liquid of pleasant taste when diluted. It is offered as a substitute for infusion of valerian and the like as a nervine and antispasmodic. Dose, 10 to 25 drops in hot sweetened water.—Mfrs. Chem. Fabrik, Helfenberg, Germany; agts.: C. Reinschild Co., New York.

VALOSE is an albuminous nutritive prepared from meat.

VALSOL is an English analogue of *vasogen*, which see.

VALYL is the trade name for *valerianic acid diethylamide*, or *valeryl diethylamide*, $C_4H_9CO.N(C_2H_5)_2$. The article occurs as a colorless liquid, of a peculiar peppermint-like odor, and a burning, valerian-like taste. It is soluble in about 25 parts of water and easily soluble in alcohol or ether. It is prescribed as a nerve sedative and antispasmodic, in hysteria, cardiac palpitation, migraine, menstrual pains, etc. Dose, 2 to 4 minims, two or three times daily, in 2 minim capsules or pearls (so marketed).—Mfrs.: Meister, Lucius & Brünig, Hoescht, Germany; agts.: V. Koechl & Co., New York.

VANADIN (Weber) is a solution of a vanadium salt (?) with sodium chlorate. It is used as an antiseptic in pulmonary tuberculosis. Dose, 6 to 30 drops daily.

VANADINE is a trade name latterly applied to *vanadic acid* (vanadium pentoxide). V_2O_5 , a brown powder insoluble in the ordinary solvents. The product is used in disturbances dependent upon sluggish metabolism, particularly in tuberculosis. *Vanadine-sanguinal pills* each contain 1/650 grain of vanadic acid and $1\frac{1}{2}$ grains of sanguinal. Dose, 2 or 3 pills before meals. *Vanadine dusting powder* consists of vanadic acid and zinc peroxide, and is intended as a wound antiseptic.—Mfrs.: Krewel & Co., Cologne, Germany; agts.: Lehn & Fink, New York.

VANADIOL and VANADIOSERUM are two vanadium preparations introduced for use in tuberculosis.—Mfr.: Vanadium-Depot, Kleve, Germany.

VANADIOL Hélois, is not, according to Prescher, a vanadium compound, but a solution of sodium hypochlorite; probably nothing but Labarraque's solution.—Mfrs.: Société Française des Composés du Vanadium, Paris, France.

VAPO-CRESOLENE, according to analyses made at the chemical laboratory of the American Medical Association, "is essentially cresol and corresponds in every respect to cresol U. S. P." As is known, it is used chiefly by inhalation in whooping-cough.—Mfr.: Vapo-Cresolene Co., New York; agts.: Schieffelin & Co., New York.

VAPORIN is a mixture of naphthalin 180 parts, camphor 20 parts, oil eucalyptus 3 parts, and oil of pine

shoots 3 parts. For use, about a tablespoonful is put into a glassful of hot water and completely evaporated by heating the latter. The patient inhales the vapor. Mfrs.: Krewel & Co., Cologne, Germany; agts.: Lehn & Fink, New York.

VARICIN is a bismuthated cambric bandage intended for use in varicose veins of the leg, ulcers of the leg, etc. Mfr.: Herm. Maschke, Dresden N, Germany.

VARICOL is defined as "a chemical compound of about 20 per cent. iodine, 48 per cent. of bismuth" [bismuth subnitrate?] "and 30 per cent. resorcin-sulphonic acid." It is marketed only as *suppositories*, each of which is said to contain varicol ("bismuth iodo-resorcin-sulphonate") 0.4 gram, tannic acid 0.15 gram, calcium chloride 0.05 gram, zinc oxide 0.25 gram, balsam peru 0.15 gram, with cacao butter and wax. They are intended as a pile remedy and rectal astringent in general.—Mfrs.: Morgenstern & Co., New York.

VASAPON is a preparation analogous to *vasogen*, made by Bohny, Hollinger & Co., Basle, Switzerland.

VASELOXYNE is another analogue of *vasogen*, made by Vloten & Duareau, Ansinères, France.

VASENOL is an emulsion of petrolatum, containing 25 per cent. of water; a yellowish-white, smooth, ointment-like substance which can take up several times its weight of water and is miscible with fats, salts, powders, etc. *Vasenol liquid* is a white, neutral emulsion of paraffin oil containing $33\frac{1}{3}$ per cent. of water, readily emulsifiable with aqueous fluids, and employed as an emollient base for liniments, creams, etc., to be used on burns, as well as a lubricant for catheters, etc. *Vasenol powder* carries 10 per cent. of vasenol. *Vasenol-mercury* is a smooth $33\frac{1}{3}$ per cent. mercurial ointment. *Vasenol-formalin* is an antihydrotic foot-powder, consisting of vasenol powder, 5 to 10 per cent. of formaldehyde solution, and 1 per cent. of salicylic acid. It is well rubbed into the feet after previous ablution with 1 per cent. alcoholic solution of salicylic acid. See caution regarding formaldehyde compounds under *formaldehyde*.—Mfr.: Dr. A. Kopp, Leipzig, Germany.

VASEPTOL is a vanadium preparation employed as a wound antiseptic.

VASOCONSTRICTINE is a British trade name for the active principle of the suprarenal capsule.—Mfrs.: Squire & Sons, London, Eng.

VASODERMOL is described as "a liquid prepared by a special process (dialytic oxidation) from hydrocarbons and possessing the property of promptly penetrating the skin without leaving a residue or manifesting any therapeutic action of its own."—Mfr.: Otto Hütter, Cologne, Germany.

VASOGEN is defined as *oxygenated vaseline*. It is a faintly alkaline, yellowish-brown semi-liquid mass, forming emulsion-like mixtures with iodine, creosote, quinine, salicylic acid and other water-insoluble medicaments, which are readily absorbed through the skin. It is hence employed as an inunctionary vehicle in endermic medication. It is marketed in combination with naphthol, camphor-chloroform, guaiacol, ichthyol, iodoform, menthol, methyl salicylate, and thiol respectively, besides the drugs named above; also as *solid* vasogen (of ointment consistence), mercury-vasogen ointment, and capsules of a number of combinations (creosote, iodine, etc.) Numerous substitutes and analogous products have been launched (petrogen, vasolimentum, vasopolentum, vasol, vasoal, etc.).—Mfrs.: E. F. Pearson & Co., Hamburg; agts.: Lehn & Fink, New York.

VASOL is, according to Kottmeyer, a product similar in every respect to the better-known *vasogen*, and marketed also as *iodovasal*, a clear, brown fluid containing 7 per cent. of iodine.—Mfrs.: G. Hell & Co., Troppau, Austria.

VASOLIMENTUM, proposed as a succedaneum for *vasogen*, is essentially an emulsion of ammoniacal oil soap, alcohol and paraffin. The *liquid* form is prepared from liquid paraffin, oleic acid and spirit of ammonia; the *solid* vasolimentum from hard paraffin, oleic acid and spirit of ammonia. Similarly to vasogen, it readily takes up water-insoluble drugs and easily penetrates the skin. Combinations of vasolimentum with creolin, with chloroform and camphor, juniper tar, eucalyptol, guaiacol, mercury, iodoform, ichthyol, iodine, creosote, menthol, naphthol, tar, salicylic acid, sulphur and thiol are also made.

VASOPOLENTUM is described as an olein-paraffin which in the solid form serves as an ointment base and in the liquid form as a solvent, and vehicle for various medicaments, and thus intended as a substitute for vasogen and its compounds. The solid variety is also marketed combined with mercury (40 per cent).—Mfrs.: Rump & Lehnerns, Hanover, Germany.

VASOTHION is a preparation analogous to the thiosapol and thiosavonal containing about 10 per cent. of organically combined sulphur. It is made from vasogen. It is used in skin diseases, as ointment or emulsion.

VASOTONIN (Dr. B. Fellner) is a compound of yohimbine nitrate and urethane, occurring as a water-soluble substance of the melting-point 260 to 261° C. It is marketed only in ampuls containing 1.2 c.c. of a solution, representing in each c.c. 0.06 gram of vasotonin (equivalent to 0.01 gram of yohimbine alkaloid). It is employed as a vaso-dilator subcutaneously.—Mfr.: Theo. Teichgräber, Berlin S.

VASOVAL is a counterpart of *vasogen*, employed as an inunctionary vehicle in endermic medication.—Mfrs.: Bohny, Hollinger & Co., Basle, Switzerland.

VELLEDOL is claimed to be the active principle of *viscum album* (mistletoe) and is put forward as a remedy in menstrual disturbances and arterial sclerosis. Dose, $\frac{1}{2}$ to $\frac{3}{4}$ grain.—Mfrs.: Adrian & Co., Paris, France; agts.: E. Fougere & Co., New York.

VELLOLIN is a brand name of wool fat, made by Wollwäscherei und -Kämmerei, Döhren, Germany.

VELOPURAL is a soft olive-oil soap, marketed also as *mercury-velopural* containing $33\frac{1}{3}$ per cent. of mercury and recommended for the inunction treatment of syphilis.

VELOPURIN is an ointment base obtained by dissolving 60 to 150 grams of oil soap in 1000 c.c. of alcohol, filtering, and thoroughly incorporating 50 to 100 grams of olive oil, continuing energetic trituration until a homogeneous mass results.—Mfr.: Dr. Ludwig, Berlin, Germany.

VELOSAN. See *fetrosal*

VERACOLATE is a combination of the bile salts (sodium glycocholate and sodium taurocholate) with extract of cascara, marketed in the form of tablets and extolled as a cholagogue in hepatic insufficiency and as a laxative. Dose, 1 tablet three times a day, or 3 tablets on retiring.—Mfrs.: Marcy Co., Boston, Mass.

VERATROL (*pyrocatechin dimethyl ether*), $C_6H_4(OCH_3)_2$, occurs as a liquid soluble in alcohol, ether and fatty oils. It is used externally as a paint in intercostal neuralgia, and combined with potassium iodide topically in orchitis, as well as internally in tuberculosis. Dose, 2 drops three times daily, in capsules.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

VERATRONE is a clear, amber-colored, non-alcoholic, aqueous fluid extract of *veratrum viride*, having a pleasant odor and a slightly bitter taste. It is one-fourth the strength of the official fluid extract of *veratrum*. Chlore-tone is added as a preservative. It is intended especially for hypodermic use, being far less irritating than the older liquid forms of *veratrum*. It is recommended in particular for the treatment of eclampsia. Dose, 10 to 20 minims. Mfrs.: Parke, Davis & Co., Detroit, Mich.

VERGOTININE is a French veterinary remedy for pectoral diseases, dyspepsia and cardiac affections in horses. According to the manufacturers, it consists of veratrine 3 parts, strychnine sulphate 2 parts, ergotinine crystals 10 parts and glycerin 150 parts.—Mfr.: C. Velprey, Reims, Germany.

VERICOL is an ointment containing boric acid, zinc oxide, cresol, ichthyol and camphor, with petrolatum.

VERITABLE PILULES, recommended for the treatment of neuralgia, are claimed to contain quinine, cinchona bark and aconitine nitrate. An analysis showed the presence of digitalin, quinine sulphate, traces of arsenous acid, wheat-starch, gum tragacanth, cane sugar and coloring matter.

VERMIL is a santonin confection for use as a vermicide.

VEROBROMAL is a compound of some bromide with veronal, recommended as a hypnotic and nerve sedative.—Mfrs.: L. & J. Egger, Budapest, Hungary.

VEROFORM ANTISEPTIC is a yellowish liquid containing 6 per cent. of formaldehyde gas dissolved in a solution of soap. It mixes with water in all proportions and is incompatible with the alkaline earths, heavy metals and acids. It is used in 1 to 2 per cent. solutions.—Mfrs.: Veroform Hygienic Co., Newark, N. J.

VEROFORM GERMICIDE is a yellowish liquid containing 20 per cent. of formaldehyde gas dissolved in a solution of soap. It mixes with water in all proportions. It is used as a bactericide and detergent in $\frac{1}{2}$ to 1 per cent. solution.—Mfrs.: Veroform Hygienic Co., Newark, N. J.

VERONAL is the trade name for *diethymalonylurea* or *diethylbarbituric acid*, $(C_2H_5)_2C.(CO)_2(NH)_2.CO$. The article occurs as a white, crystalline, odorless, slightly bitter powder, soluble in about 150 parts of water, more readily soluble in alcohol. It is used as a hypnotic and nerve sedative, particularly in cases of insomnia and excitation not due to violent pain. Dose, 5 to 15 grains, in hot water or tea.—Mfrs.: Farbenfabriken of Elberfeld (Germany) and New York, also E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

VERONAL-SODIUM is a trade name for the sodium salt of veronal (diethylbarbituric acid). See *sodium diethylbarbiturate*.—Agts.: Merck & Co., and Farbenfabriken of Elberfeld Co., New York.

VESCULAN is the name applied to tablets said to contain extract of bladder-wrack 2 grains, podophyllin $\frac{1}{2}$ grain and compound extract of rhubarb 2 grains. The tablets are exploited as an antiflat.—Mfrs.: Drs. R. & O. Weil, Frankfurt-on-M., Germany.

VESIPYRINE, according to C. Hofmann and R. Lüders, has the formula $C_6H_4.OCH_3.CO.COOC_6H_5$ and may hence be regarded as *acetylsalol*. It occurs as crystals melting at 97° C., soluble in alcohol, ether or chloroform, but insoluble in water. It is almost tasteless, and is odorless and permanent in air and light. Administered internally it is decomposed only on reaching the intestines, and, it is stated, the liberated acetic acid overcomes the possible toxic action of the phenol constituent. In view of the latter circumstance, it is intended chiefly as a substitute for

salol, but deemed serviceable in many cases also as a succedaneum for aspirin (acetylsalicylic acid) in acute rheumatism, rheumatoid pains, neuralgias and influenza. Dose, 8 to 15 grains.—Mfrs.: Chem. Werke Reihestieg, Hamburg, Germany.

VESOL, also called "soluble cresol," is a disinfectant and antiseptic for surgical and obstetrical use; probably analogous to if not identical with the official compound solution of cresol.—Mfrs.: Schieffelin & Co., New York.

VESOL PASTILLES are said to contain the extracts of phytolacca and bladder-wrack. They are exploited as an antiflat.—Mfr.: Löwen-Apotheke, Dresden, Germany.

VESTOSOL is an ointment said to contain formaldehyde, boric acid and zinc oxide. See caution regarding the use of formaldehyde under *formaldehyde*.—Mfr.: Dr. Lonner, Schöneberg, Germany.

VETOL is *veterinary yohimbine*, marketed as *mild and strong*.

VETRINOL is a *veterinary unguentine*.—Mfrs.: Norwich Pharm. Co., Norwich, N. Y.

VIFERRAL is a polymer of anhydrous chloral, resulting from the action of pyridine upon chloral, and occurs as a white powder, of unpleasant taste, melting at 153° C., slowly soluble in cold water and decomposed by hot water. It is prescribed as a hypnotic, especially in nervous insomnia where there is much excitement and no pain. Dose, 15 to 30 grains, in wafers or tablets (swallowed quickly). Marketed also 1-grain tablets.—Mfr.: Dr. Simon Gärtner, Halle, Germany.

VINOPYRIN is a trade name applied to *para-phenetidin tartrate*, an article similar to if not identical with *tartrophen*. The substance occurs as a white, crystalline powder, soluble in about 25 parts of water, less freely soluble in alcohol and insoluble in ether. It is prescribed as an antipyretic and analgesic in the dose of 12 to 15 grains several times daily as powders or tablets (also so marketed). It is incompatible with alkalies.—Mfr.: E. Walther Fischer, Böhlitz-Ehrenberg, Germany.

VIOFORM (*iodochloroxyquinoline*; *nioform*), $C_8H_7NOH \cdot IHCl$, occurs as a greenish-yellow, practically odorless, very bulky powder, insoluble in the common solvents. It contains about 42 per cent. of iodine, and is employed as an antiseptic vulnerary similarly to iodoform. Marketed also as gauze, 2½ and 5 per cent.—Mfrs.: Baseler Chem. Fabrik, Basle, Switzerland; agts.: C. Bischoff & Co., New York.

VIRO is a prophylactic of gonorrhea as well as chancre. It consists of a metal tube containing 20 per cent. solution of protargol in glycerinated gelatin, and of a larger tube containing a 5 per cent. lysol cream.—Mfrs.: Viro Co., Berlin W. Germany.

VIROGEN is said to be "a combination of limé and iron glycerophosphates with casein that has been rendered perfectly soluble by a special process."—Mfr.: A. A. Wolfson, Charlottenburg, Germany.

VIROL is a substitute for cod-liver oil as a nutritive in children. It contains iron and free oleic acid.

VIRONE is a combination of yohimbine and glycerophosphates of calcium, sodium, lithium, strontium, iron and strychnine employed as an aphrodisiac. Marketed only in capsules, by C. Reinschild Co., New York.

VIROSANOL Pills contain, according to Dr. Aufrecht's analysis, lecithin, quinine and iron in organic combination. They are exploited as a remedy for impotence and neurasthenia.—Mfr.: H. Unger, Berlin, Germany.

VISCIN is described as a glutinous substance obtained from *viscum aucuparium* and resembling bird-lime. It is employed as a vehicle for cutaneous remedies.—Mfr.: Dr. Loebell, Mügeln, Germany.

VISCIN PLASTER is obtained by treating viscin (a glutinous substance from the bark of *viscum aucuparium*) with non-volatile oils or fats, waxes, resins, non-volatile hydrocarbons, etc. Either a stiff, smooth, sticky, unctuous substance or a fluid is obtained, as may be desired. Either product is said perfectly to exclude the air when applied to a part, not to be affected by water but to be removable by a warm soap bath. An ointment base may be made by heating together 60 parts of viscin and 40 parts of anhydrous wool fat, and mixing well.

VISCOLAN is a yellowish-green ointment base, the main constituent of which is said to be viscin, described above.—Mfr.: Dr. Loebell, Mügeln, Germany.

VISOGEN preparations are Viennese analogues of the *vasogen* combinations.—Mfrs.: G. & R. Fritz, Vienna, Austria.

VISVIT (contraction of *vis vitæ*) is the name given to a nutritive prepared from the natural nutritious and invigorating constituents of eggs, milk, hemoglobin-albumin and cereals. It contains about 80 per cent. of nitrogenous substances, 15.26 per cent. of carbohydrates and 0.24 per cent. of lecithin. The article occurs as a grayish-yellow powder, of faint and not unpleasant odor.—Mfrs.: Goedecke & Co., Berlin; agts.: Schering & Glatz, New York.

VITAGEN is an iron and manganese saccharate elixir made by a Hamburg firm and containing 0.2 per cent. of metallic iron and 0.083 per cent. of manganese metal. It is offered as a hematopoietic. Dose, $\frac{1}{2}$ to 1 tablespoonful.

VITALIN is a disinfectant mixture of resin soda soap and resin oil. It has a strong, bituminous odor.

VITOGEN is a mixture of boric acid with other antiseptics, employed as a vulnerary and cicatrizing, undiluted.—Mfrs.: G. F. Harvey Co., Saratoga Springs, New York.

VITOSE is an ointment base described as being "glycerin and oil albuminate; odorless, neutral, non-irritating, and not becoming rancid." Incompletely soluble in chloroform, benzene, or ether; takes up almost any proportion of water, oil, or other fats; melting point, 28° C.—Mfr.: J. E. Stroschein, Berlin SO, Germany; agts.: Fischer Chem. Importing Co., New York.

VIXOL, according to an analysis made by Moeller, is an alcoholic liquid containing 0.1 per cent. of nitroglycerin, 0.1 per cent. of atropine, and 2 per cent. of potassium nitrate, with some salicylic acid, vegetable extracts and glycerin. It is exploited as a remedy for asthma, hay fever, etc.—Mfrs.: Vixol Syndicate, London EC, Eng.

VOLESAN capsules are said to contain 0.3 gram of carbonated creosote, 0.0025 gram of heroin, 0.25 gram of tolu balsam, and 0.065 gram of camphor. They are used in diseases of the respiratory tract. Dose, 3 to 6 capsules per day. (See caution regarding heroin under *heroin hydrochloride*.)—Marketed by Lehn & Fink, New York.

VOSEPTOL is a vanadium preparation recommended as a vulnerary.

VULNOPLAST is a dressing material for wounds, consisting of three closely compressed layers, the undermost of which is mull, upon which an ointment with a gelatin base is spread. Dr. Benario has selected as the medicaments 10 per cent. of protargol and 5 per cent. of xeroform, which act as antiseptics and astringents. The middle layer is absorbent cotton and the outer one muslin or cheese cloth.—Mfr.: Dr. Wasserzug, Frankfurt-on-M., Germany.

W

WEISS NEUROLIN is the name applied to tablets containing 2 per cent. of nutritive salts, 3 per cent. of peroxides and 4 per cent. of iron.

WEISSOL is a coryza and throat remedy said to consist of hypophosphites and peroxides and used by insufflation into the nose and throat respectively.—Mfrs.: Kraft- und Nährstoff Co., Hanover, Germany.

WELT ANÆSTHETICUM (*universal anesthetic*), according to Dr. J. Koch, consists of adrenaline hydrochloride, sodium chloride, chlorotone, cocaine hydrochloride, menthol, eucalyptol and distilled water.

WILBURINE is a brand name for yellow *petrolatum*.

WISMOL is a mixture of magnesium peroxide with bismuth oxide (about 25 per cent.), occurring as a white, odorless, fine powder, insoluble in the ordinary solvents. It is heralded as a substitute for iodoform externally, readily liberating oxygen on contact with wound secretions.—Mfr.: Kopf-Apotheke, Frankfurt-on-M., Germany.

WOOLELOSE is absorbent cotton containing cellulose. It is manufactured in Holland.

WUK is an aqueous yeast extract, occurring as a light-brown powder of feeble odor and freely soluble in water. It is intended to serve as a substitute for meat extract, though lacking the salts and bases of the latter as well as its stimulating properties.

WURMFELD is said to contain santonin and phenolphthalein.

X

XAMETRINE is a trade name for the official *hexamethylenamine* (hexamethylenetetramine).

XANOL is a trade name for the National Formulary *caffeine sodio-salicylate*, a freely soluble double-salt of caffeine in water and hence adapted for subcutaneous injection.

XANTHOPICRIT is a trade name for *berberine*.

XAXA is a brand of *acetyl-salicylic acid* (aspirin).

XAXAQUIN is the trade name adopted for *quinine acetylsalicylate* of British manufacture. It is marketed only in 3-grain tablets, and is claimed to possess the antiseptic and antipyretic action of quinine as well as the antirheumatic and anodyne properties of aspirin. It is hence intended for use in influenza, neuralgia, rheumatism, etc.—Mfrs.: Burroughs, Wellcome & Co., London and New York.

XERASE is described as a mixture of pure, dry yeast, with sugar and nutritive salts. It is marketed as 3-grain vaginal suppositories, and is intended for use in suppurative and septic conditions of the female genital tract.—Mfrs.: J. D. Riedel Co., Berlin and New York.

XEROFORM (*tribromphenol-bismuth*; *bismuth tribromphenate*), $\text{Bi}_2\text{O}_3(\text{C}_6\text{H}_2\text{Br}_3\text{OH})\text{BiOH}$, occurs as a yellow nearly odorless and tasteless powder, containing 50 per cent. of bismuth oxide and insoluble in the ordinary solvents. It is used externally as an antiseptic and drying vulnerary and dermic; internally as an intestinal astringent and disinfectant. Dose, 10 to 15 grains several times daily.—Mfrs.: Heyden Chem. Works, Radebeul (Germany) and New York.

XEROSIN is a flesh-colored, antiseptic, skin varnish that is readily washed off. It consists of gelanthum, ichthyol, boric acid, zinc oxide and talcum.—Mfr.: E. Weigert, Breslau I, Germany.

XYLENE (*xytol*; *dimethylbenzene*) is the natural mixture of ortho-, meta- and para-xylene as present in coal tar. It occurs as a colorless liquid of the specific gravity of about 0.850. While used mostly technically, it has been

recommended as an internal antiseptic in smallpox and bacterial diseases of the respiratory tract. Dose, 5 to 15 minims three times daily, in capsules or in red wine.—(Nonproprietary.)

XYOL is a formaldehyde and soap solution, analogous to lysolform (veroform). A "purest" and a "pure" grade are marketed, the latter being intended for general disinfectant purposes on a large scale. A soap containing 10 per cent. of "xyol purest" is known as *kaliol*.—Mfrs.: Chem. Fabrik Flick, Ichendorf, Germany.

Y

YANATAS is said to be a 1 per cent. solution of chloral hydrate in water colored red. It is extolled as a remedy for sea-sickness.

YEAST (*tax medicinalis*) has in recent years come into vogue as an antiseptic and alterative in such affections as furunculosis, folliculitis, articular rheumatism, erysipelas, typhoid fever, phthisis, etc. Dose, 1 to 3 teaspoonfuls before meals. (Many special preparations of yeast have latterly been marketed: see *Furunculin*, *Levuretin*, *Levurin*, *Levurinos*, *Mycodermin* and *Zymin*.)

YERBAZIN is an aromatized syrup of yerba santa, employed for disguising the taste of quinine and other bitter drugs.—Mfrs.: Eli Lilly & Co., Indianapolis, Ind.

YOGHOURT is a Turkish fermented milk made from milk boiled down to two-thirds or one-half its original volume. It is said to be a good nutritive as well as diuretic, analogous to koumyss or zoolak. *Yoghourt tablets* contain the lactic acid ferment (lactic acid bacillus), and are used for the preparation of yoghurt.

YOHIMBETOL is a yohimbine for veterinary use made by Chem. Fabrik, Güstrow, Germany; agts.: Lehn & Fink, New York.

YOHIMBINE HYDROCHLORIDE, $C_{21}H_{33}O_2N_2 \cdot HCl$, is the salt of an alkaloid isolated by Dr. L. Spiegel from yohimbe bark, the bark of *corynanthe yohimbe*, a rubiaceae indigenous to the Cameroons. It occurs as a white, crystalline, bitter powder melting between 285° and 290° C. and moderately soluble in water or alcohol. It is credited with aphrodisiac properties. Dose, $1/12$ to $1/8$ grain three times daily, as tablets (also so marketed), or by hypodermic injection.—Made by various European firms, but sold on this market only by Lehn & Fink, New York.

YSYN is an albumin preparation derived from milk and containing, according to Hoppe, 85 to 87.5 per cent. of pure albumin. It occurs as a white, almost tasteless powder, and is said to be readily assimilated. It is intended to be used as a nutritive.—Mfrs.: E. Rott & Co., Goettingen-Magdeburg, Germany.

Z

ZAMBA Capsules for urethritis each contain $\frac{3}{4}$ grain of salol and 3 minims of oil of sandalwood.—Mfr.: E. Lahr, Würzburg, Germany.

ZAMBELLETTI'S IODIZED SERUM consists, according to Dr. Longhi, of physiologic salt solution containing in addition 0.03 gram and 0.05 gram respectively (two strengths are marketed) of iodine in each cubic centimeter.

ZARCOL is a dermatological remedy of undivulged composition, advertised in medical journals as "the ideal skin cure."—Mfrs.: Carrollton Chem. Co., Baltimore, Md.

ZEMACOL (name derived from "eczema colloid") is a "colloidal emollient containing extract of cutaneous tissues embracing rete mucosum of the healthy yearling lamb, combined with glycerin, salicylic acid and other antiseptics and aromatic oils." According to analyses made by the Council on Pharmacy and Chemistry of the American Medical Association, the article consists essentially of gummy matter having the properties of tragacanth 2.02 per cent., salicylic acid 0.67 per cent., matter having the general properties of wool-fat 0.2 per cent., glycerin 5.5 per cent., water and alcohol 91 per cent., and aromatic oils and phenol-like bodies traces. It is exploited as an antipruritic and antiseptic emollient as well as a remedy for eczema.—Mfr.: Norwich Pharmacal Co., Norwich, N. Y.

ZEMATONE is an anti-asthmatic powder said to contain grindelia, stramonium leaves, larch agaric, poppy heads and potassium nitrate.

ZEO BEECH-TAR BATH is a thick, black liquid of characteristic tarry odor and of the same therapeutic action as empyreumatic oil of birch, but milder. When added to water it yields a milky liquid of a not particularly pleasant odor.—Mfrs.: Kopp & Joseph, Berlin W, Germany.

ZEO PASTE is a tooth paste containing potassium chlorate and magnesium peroxide.—Mfrs.: As preceding.

ZIMPHEN. See *zymphen*.

ZINC ALUMNOL is described under the title *zinol*.

ZINC BORATE, $\text{ZnB}_2\text{O}_4 \cdot 7\text{H}_2\text{O}$, occurs as a white, amorphous, odorless powder, insoluble in the ordinary organic solvents. It is used as an antiseptic and astringent dusting powder or ointment.—(Nonproprietary.)

ZINC CYANIDE, $\text{Zn}(\text{CN})_2$, occurs as a white powder soluble in potassium cyanide solution and insoluble in water or alcohol. It is administered in doses of $\frac{1}{12}$ to $\frac{1}{6}$ grain several times daily in epilepsy, hysteria, whooping-cough, carcinoma of the stomach, etc.; also in cardiac affections.—(Nonproprietary.)

ZINC FORMASAL is the zinc salt of formasal (methylene disalicylic acid). It is used in the treatment of skin affections. See caution under *formaldehyde*.—Mfrs.: Organic Chem. Co., Philadelphia, Pa.

ZINC GALLATE (*zinc subgallate*) is a grayish-green powder insoluble in the ordinary solvents. It is prescribed in intestinal fermentation, phthisical night-sweats, eczema, gonorrhea, etc. Dose, 1 to 4 grains several times daily; applied externally pure, or as 10 to 20 per cent. dusting powder or ointment.—(Nonproprietary.)

ZINC HEMOL is a compound of hemol with 1 per cent. of zinc; a dark-brown powder, insoluble in the usual solvents. It is used in chlorosis, chronic diarrhea, etc. Dose, 5 to 10 grains three times daily.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ZINC HYPOPHOSPHITE, $\text{Zn}(\text{H}_2\text{PO}_3)_2 + \text{H}_2\text{O}$, occurs as colorless, hygroscopic crystals soluble in water. It is used mainly as an alterative and nervine in whooping-cough, chorea, chronic diseases, etc. Dose $\frac{1}{2}$ to $1\frac{1}{2}$ grains.—(Nonproprietary.)

ZINC IODIDE, ZnI_2 , is now official in the U. S. P., and hence fully described in easily accessible works of reference.

ZINC LACTATE, $\text{Zn}(\text{C}_3\text{H}_5\text{O}_2)_2 + 3\text{H}_2\text{O}$, occurs as white crystals soluble in about 53 parts of water. It is used internally as a nervine in epilepsy and other neuroses. Dose, $\frac{1}{2}$ to 1 grain as pills or tablets.—(Nonproprietary.)

ZINC PERHYDROL is a brand name of *zinc peroxide*.—Mfr.: E. Merck, Darmstadt, Germany; agts.: Merck & Co., New York.

ZINC PERMANGANATE, $\text{Zn}(\text{MnO}_4)_2 + 6\text{H}_2\text{O}$, forms almost black crystals, readily, though as a rule incompletely soluble in water, decomposed by other solvents. It is used as a disinfectant and astringent in gonorrhea (1:4000 solution), eye diseases (1 to 2:1000 solution), etc. It should not be brought into contact with extracts, with alcohol, glycerin or other organic solvents, lest explosion occur.—(Nonproprietary.)

ZINC PEROXIDE is the zinc salt ZnO , containing an admixture of not more than 55 per cent. of zinc oxide. It occurs as a yellowish-white, voluminous, odorless, tasteless powder, insoluble in water. It is used in the extemporaneous preparation of hydrogen dioxide for wounds, chronic ulcers, etc., and is applied as a dusting powder either alone or mixed with tannic acid, or as 10 per cent. ointment, or in the form of gauze or as soap (10 per cent.).—(Nonproprietary.)

ZINC PEROXIDE SOAP, ten per cent. is said to be powerfully antiseptic, yet non-irritating to the skin. It is intended both for dermatological and surgical purposes. Marketed by Roessler & Hasslacher Chem. Co., New York.

ZINC PHOSPHIDE, Zn_3P_2 , formerly official, occurs as dark-gray, crystalline lumps having the odor of phosphorus, and insoluble in water or alcohol. It is used as a nerve stimulant and aphrodisiac. Dose, 1/60 to 1/12 grain, in pills or tablets.—(Nonproprietary.)

ZINC SALICYLATE $\text{Zn}(\text{C}_6\text{H}_4\text{OH.COO})_2 + 3\text{H}_2\text{O}$, occurs as white needles soluble in water and in alcohol. It is used externally in dermatological practice in substance or as "Itallie's zinc-gelatin," and internally as a nervine analogously to zinc valerianate. Dose, 1/2 to 1 grain three times daily.—(Nonproprietary.)

ZINC SOZOIODOLE.—See under *sozoiiodole*.

ZINC STEARATE, a very fine dusting-powder, is now official.

ZINC SUBGALLATE.—See *zinc gallate*.

ZINC SULPHANILATE.—See *nizinc*.

ZINC SULPHOCARBOLATE is now official in the U. S. Pharmacopœia under the title *zinc phenolsulphonate*

ZINC TANNATE (*sel de barnit*), $\text{Zn}_2(\text{C}_{27}\text{H}_{19}\text{O}_{17})_2$, occurs as a gray powder insoluble in water and alcohol, soluble in diluted acids. It is used as an astringent internally in doses of 1 to 3 grains several times daily; externally in gonorrhea, in 1:1500 to 1:300 suspension in thin mucilage.—(Nonproprietary.)

ZINCODAT (*zinkodat*) is a trade-name for *zinc peroxide*, ZnO_2 , used by the Chem. Fabrik, Coswig, Germany.

ZINCONAL (*zinkonal*) is a brand of *zinc peroxide*.

ZINCOPYRIN (*zinkopyrin*) is described as a double salt of 1 molecule of zinc chloride and 2 molecules of phenyldimethylpyrazolon (antipyrine). It is recommended as a cauterizing agent, and said to be less irritating and painful than zinc chloride itself—Mfr.: Knoll & Co., Ludwigshafen-on-Rh. (Germany) and New York.

ZINCOQUINOL (*zinkochinol*) is *zinc oxyquinolinesulphonate* and is employed as an antiseptic dusting-powder.—Mfrs.: Franz Fritsche & Co., Hamburg, Germany; agts.: Parmele Pharm. Co., New York.

ZINOL (*zinc alumnol*) is *aluminium* and *zinc acetate*, a combination of 1 part of zinc acetate and 4 parts of alumnol. It occurs as a white, odorless powder, readily soluble in water, but insoluble in alcohol. It is used as an injection in gonorrhea (3–6:2000 solution).—Mfr.: Dr. J. Lewinsohn, Berlin, SW., Germany.

ZITRONENTHEE (German).—See *lemon tea*.

ZOMOL is a desiccated meat juice extolled for use in tuberculosis. It occurs as a small, red, very hygroscopic scales, almost completely soluble in water. It is administered in bouillon, milk, water, etc. Dose, 10 to 30 grains.—Mfr.: Dr. Lewinsohn, Berlin SW., Germany.

ZUCKERIN is a trade name for *saccharin*.

ZUCK-OOH CREAM is a soft, white paste, possessing a weak acid reaction and a very agreeable odor. Its chief constituents, it is said, are white wax, water, starch and gelatin.

ZYME-OID is advertised as "a powerful gastrointestinal antiferment"; "a double borate salt." According to analyses made at the laboratory of the American Medical Association, the article is essentially a mixture of potassium chlorate (40.43 per cent.), sodium nitrate (33.22 per cent.), potassium tetraborate (1.6 per cent.), sodium tetraborate (3.31 per cent.) and boric acid (21.14 per cent.).—Mfr.: Oxychlorine Chem. Co.; Chicago, Ill.

ZYMIN is a dried, sterilized yeast, marketed in powder form, tablets and bougies. The powder is used on wounds and cutaneous lesions. The tablets are employed internally in furunculosis, obstinate skin diseases, etc. Dose, 15 grains (one tablet) three times daily. The bougies consist of 40 per cent. of zymmin, 40 per cent. of sugar, and 20 per cent. of a water-soluble indifferent excipient. They are intended for use in gonorrhea of women.—Mfr.: Hof-Apotheke, Dresden, Germany.

ZYMOTICINE is a secret, composite liquid germicide offered for use internally in cholera, pneumonia, typhoid fever, etc.—Mfrs.: Zymotidine Chem. Co., Springfield, O.

ZYMPHEN (also spelled "Zimphen") is the fanciful name applied to "*sodium metaoxycinnamate*" of the formula $C_6H_5(OH)CH:C(CN)COONa$. It occurs as yellowish crystals of bitter, astringent taste and faint aromatic odor, and soluble in water. It is offered as a digestive in cases where the gastric secretion is deficient; in large doses it is said to act as a cholagogue, laxative and diuretic. Ordinary dose $1\frac{1}{2}$ to 3 grains after meals.





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